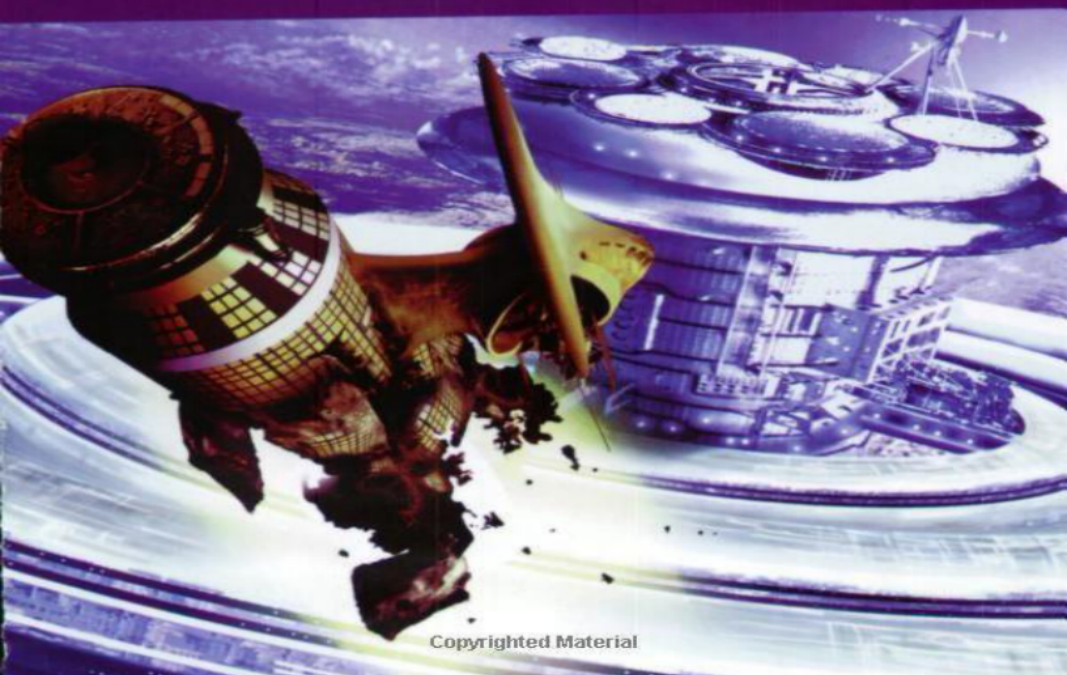


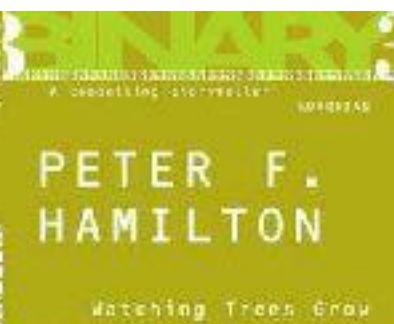
PETER F. HAMILTON

BESTSELLING AUTHOR OF THE NIGHT'S DAWN TRILOGY

Watching Trees Grow



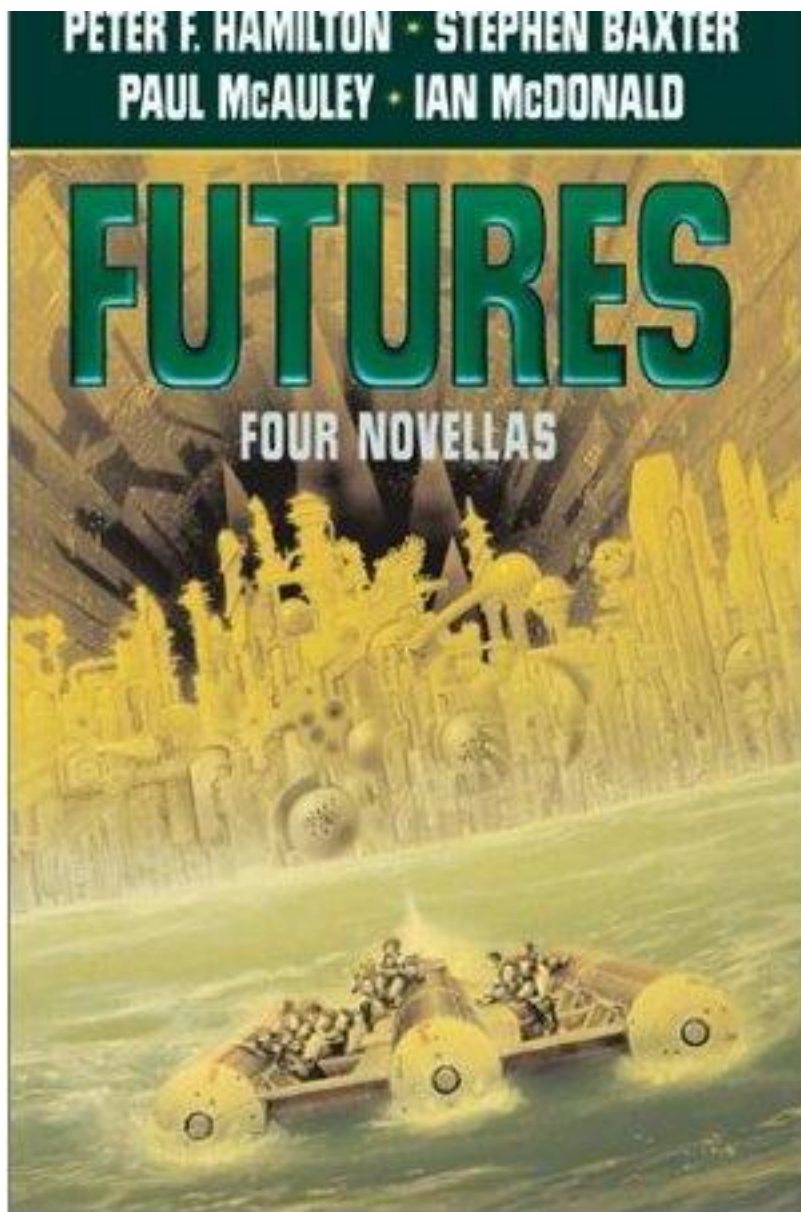
WATCHING TREES GROW



Peter F. Hamilton

Peter Hamilton brings his trademark flair for narrative sweep and epic ideas to a short novel that tells the story of a near immortal mankind that grew from the Roman Empire.

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ONE

Oxford . England DO 1832

If I was dreaming that night I forgot it the instant when that blasted telephone woke me with its shrill two-tone whistle. I fumbled round for the bedside light, very aware of Myriam shifting and groaning on the mattress beside me. She was seven months pregnant with our child, and no longer appreciated the calls which I received at strange hours. I found the little chain dangling from the light, tugged it, and picked up the black bakelite handset.

I wasn't surprised to have the rich vowels of Francis Haughton Raleigh rolling down the crackly line at me. The family's old missi dominici is my immediate superior. Few others would risk my displeasure with a call at night.

"Edward, my boy," he growled. "So sorry to wake you at this ungodly hour."

I glanced at the brass clock on the chest of drawers; its luminous hands were showing quarter past midnight. "That's all right, sir. I wasn't sleeping."

Myriam turned over and gave me a derisory look.

"Please, no need to call me, sir. The thing is, Edward, we have a bit of a problem."

"Where?"

"Here in the city, would you believe. It's really the most damnable news. One of the students has been killed. Murdered, the police seem to think."

I stopped my fidgeting, suddenly very awake. Murder, a concept as difficult to grasp as it was frightening to behold. What kind of pre-Empire savage could do that to another person? "One of ours?"

"Apparently so. He's a Raleigh , anyway. Not that we've had positive confirmation."

"I see." I sat up, causing the flannel sheet to fall from my shoulders. Myriam was frowning now, more concerned than puzzled.

"Can we obtain that confirmation?" I asked.

"Absolutely. And a lot more besides. I'm afraid you and I have been handed the family jurisdiction on this one. I'll pick you up in ten minutes." The handset buzzed as the connection ended.

I leaned over and kissed Myriam gently. "Got to go."

"What is it? What's happened?"

Her face had filled with worry. So much so that I was unable to answer in truth. It wasn't that she lacked strength. Myriam was a senior technical nurse, seeing pain and suffering every day at the city clinic-she'd certainly seen more dead bodies than I ever had. But blurting out this kind of news went against my every instinct. Obscurely, it felt to me as though I was protecting our unborn. I simply didn't want my child to come into a world where such horror could exist. Murder. I couldn't help but shiver as I pulled on my shirt, cold fingers making a hash of the small pearl buttons. "Some kind of accident, we think. Francis and I have to investigate. I'll tell you in the morning." When, the Blessed Mary willing, it might be proved some ghastly mistake.

My leather attache case was in the study, a present from my mother when I passed my legal exams. I had been negligent in employing it until now, some of its fine brass implements and other paraphernalia had never even been taken from their compartments. I snatched it up as if it were some form of security tool, its scientific contents a shield against the illogicality abroad in the city that night.

I didn't have a long wait in the lobby before Francis's big black car rolled up outside, crunching the slushy remnants of last week's snowfall. The old man waited patiently while I buckled the safety restraint straps around my chest and shoulders before switching on the batteries and engaging the gearing toggle. We slipped quietly out onto the cobbled street, powerful yellow headlamps casting a wide fan of illumination.

The apartment which Myriam and I rent is in the city's Botley district, a pleasant area of residential blocks and well-tended parks, where small businesses and shops occupy the ground floors of most buildings. The younger, professional members of the better families had taken to the district, their nannies filling the daytime streets with prams and clusters of small excitable children. At night it seemed bleaker somehow, lacking vitality.

Francis twisted the motor potentiometer, propelling the car up to a full twenty-five miles an hour. "You know, it's at times like this I wish the Roman Congress hadn't banned combustion engines last year," he grumbled. "We could be there in half a minute."

"Batteries will improve," I told him patiently. "And petroleum was dangerous stuff. It could explode if there were an accident."

"I know, I know. Lusting after speed is a Shorts way of thinking. But I sometimes wonder if we're not being too timid these days. The average citizen is a responsible fellow. It's not as if he'll take a car out looking to do damage with it. Nobody ever complains about horse riding."

"There's the pollution factor as well. And we can't afford to squander our resources. There's only a finite amount of crude oil on the planet, and you know the population projections. We must safeguard the future, we're going to spend the rest of our lives there."

Francis sighed theatrically. "Well recited. So full of earnest promise, you youngsters."

"I'm thirty-eight," I reminded him. "I have three accredited children already." One of which I had to fight to gain family registration for. The outcome of a youthful indiscretion with a girl at college. We all have them.

"A child," Francis said dismissively. "You know, when I was young, in my teens in fact, I met an old man who claimed he could remember the last of the Roman Legionaries withdrawing from Britain when he was a boy."

I performed the math quickly in my head. It could be possible, given how old Francis was. "That's interesting."

"Don't patronize, my boy. The point is, progress brings its own problems. The world that old man lived in changed very little in his lifetime—it was almost the same as the Second Imperial Era. While today, our whole mindset, the way we look at our existence, is transformed every time a new scientific discovery drops into our lap. He had stability. We don't. We have to work harder because of that, be on our guard more. It's painful for someone of my age."

"Are you saying today's world makes murder more likely?"

"No. Not yet. But the possibility is there. Change is always a domino

effect. And the likes of you and I must be conscious of that, above all else. We are the appointed guardians, after all."

"I'll remember."

"And you'll need to keep remembering it as well, not just for now, but for centuries."

I managed to prevent my head from shaking in amusement. The old man was always going on about the uncertainties and dangers of the future. Given the degree of social and technological evolution he'd witnessed in the last four hundred years, it's a quirk which I readily excuse. When he was my age the world had yet to see electricity and water mains; medicine then consisted of herbs boiled up by old women in accordance with lore already ancient in the First Imperial Era. "So what do we know about this possible murder?"

"Very little. The police phoned the local family office, who got straight on to me. The gentleman we're talking about is Justin Ascham Raleigh; he's from the Nottingham Raleighs. Apparently, his neighbor heard sounds coming from his room, and thought there was some kind of fight or struggle going on. He alerted the lodgekeepers. They opened the room up and found him, or at least a body."

"Suspicious circumstances?"

"Very definitely yes."

We drove into the center of Oxford . Half past midnight was hardly late by the city's standards. There were students thronging the tree-lined streets, just starting to leave the cafes and taverns. Boisterous, yes; I could remember my own time here as a student, first studying science, then later law. They shouted as they made their way back to their residences and colleges; quoting obscure verse, drinking from the neck of bottles, throwing books and bags about... one group was even having a scrum down, slithering about on the icy pavement. Police and lodgekeepers looked on benignly at such activity, for it never gets any worse than this.

Francis slowed the car to a mere crawl as a bunch of revelers ran across the road ahead. One young man mooned us before rushing off to merge with his laughing friends. Many of them were girls, about half of whom were visibly pregnant.

"Thinks we're the civic authorities, no doubt," Francis muttered around a small smile. "I could show him a thing or two about misbehaving."

We drew up outside the main entrance to Dunbar College . I hadn't been inside for well over a decade, and had few memories of the place. It was a six-story building of pale yellow stone, with great mullioned windows overlooking the broad boulevard. Snow had been cleared from the road and piled up in big mounds on either side of the archway which led into the quad. A police constable and a junior lodgekeeper were waiting for us in the lodgekeeper's office just inside the entranceway, keeping warm by the iron barrel stove. They greeted us briskly, and led us inside.

Students were milling uneasily in the long corridors, dressed in pajamas, or wrapped in blankets to protect themselves from the cool air. They knew something was wrong, but not what. Lodgekeepers dressed in black suits patrolled the passages and cloisters, urging patience and restraint. Everyone fell silent as we strode past.

We went up two flights of spiraling stone stairs, and along another corridor. The chief lodgekeeper was standing outside a sturdy wooden door, no different to the twenty other lodgings on that floor. His ancient creased face registered the most profound sadness. He nodded as the constable announced who we were, and ushered us inside.

Justin Ascham Raleigh's accommodation was typical of a final year student-three private rooms: bedroom, parlor and study. They had high ceilings, wood paneled walls dark with age, long once-grand curtains hanging across the windows. All the interconnecting doors had been opened, allowing us to see the corner of a bed at the far end of the little suite. A fire had been lit in the small iron grate of the study, its embers still glowing, holding off the night's chill air.

Quite a little group of people were waiting for us. I glanced at them quickly: three student-types, two young men and a girl, obviously very distressed; and an older man in a jade-green police uniform, with the five gold stars of a senior detective. He introduced himself as Gareth Alan Pitchford, his tone somber and quiet. "And I've heard of you, sir. Your reputation is well established in this city."

"Why thank you," Francis said graciously. "This is my deputy, Edward Buchanan Raleigh."

Gareth Alan Pitchford bestowed a polite smile, as courteous as the situation required, but not really interested. I bore it stoically.

"So what have we got here?" Francis asked.

Detective Pitchford led us into the study. Shelving filled with a

mixture of academic reference books and classic fiction covered two walls. I was drawn to the wonderfully detailed star charts which hung upon the other walls, alternating with large photographs of extravagant astronomical objects. A bulky electrically powered typewriter took pride of place on a broad oak desk, surrounded by a litter of paper and open scientific journals. An ordinary metal and leather office chair with castors stood behind the desk, a gray sports jacket hanging on its back.

The body was crumpled in a corner, covered with a navy-blue nylon sheet. A considerable quantity of blood had soaked into the threadbare Turkish carpet.

It started with a big splash in the middle of the room, laying a trail of splotches to the stain around the corpse.

"This isn't pretty," the detective warned as he turned down the sheet.

I freely admit no exercise in self control could prevent me from wincing at what I saw that moment. Revulsion gripped me, making my head turn away. A knife was sticking out of Justin Ascham Raleigh's right eye; it was buried almost up to the hilt.

The detective continued to pull the sheet away. I forced myself to resume my examination. There was a deep cut across Justin Ascham Raleigh's abdomen, and his ripped shirt was stained scarlet. "You can see that the attacker went for the belly first," the detective said. "That was a disabling blow, which must have taken place about here." He pointed to the glistening splash of blood in the middle of the study. "I'm assuming Mr. Raleigh would have staggered back into this corner and fallen."

"At which point he was finished off," Francis said matter-of-factly. "I would have thought he was dying anyway from the amount of blood lost from the first wound, but his assailant was obviously very determined he should die."

"That's my belief," the detective said.

Francis gave me an inquiring look.

"I agree," I stuttered.

Francis gestured weakly, his face flush with distaste. The sheet was pulled back up. Without any spoken agreement, the three of us moved away from the corpse to cluster in the doorway leading to the parlor.

"Can we have the full sequence of events, please?" Francis asked.

"We don't have much yet," the detective said. "Mr. Raleigh and five of his friends had supper together at the Orange Grove restaurant earlier this evening.

It lasted from half past seven to about ten o'clock, at which point they left and separated. Mr. Raleigh came back here to Dunbar by himself around twenty past ten-the lodgekeepers confirm that. Then at approximately half past eleven, his neighbor heard an altercation, then a scream. He telephoned down to the lodgekeeper's office."

I looked from the body to the door which led back out into the corridor. "Was no one seen or heard to leave?"

"Apparently not, sir," the detective said. "The neighbor came straight out into the corridor and waited for the lodgekeepers. He didn't come in here himself, but he swears no one came out while he was watching."

"There would be a short interval," I said. "After the scream he'd spend some time calling the lodgekeepers-a minute or so."

"People must have been using the corridor at that time," the detective said. "And our murderer would have some blood on their clothes. He'd be running too."

"And looking panicked, I'll warrant," Francis said. "Someone would have seen them and remembered."

"Unless it was the neighbor himself who is the killer," I observed.

"Hey!" one of the students barked. "Don't talk about me as if I'm a piece of furniture. I called the lodgekeepers as soon as I heard the scream. I didn't bloody well kill Justin. I liked him. He was a top chap."

"Peter Samuel Griffith," the detective said. "Mr. Raleigh's neighbor."

"I do apologize," Francis said smoothly. "My colleague and I were simply eliminating possibilities. This has left all of us rather flustered, I'm afraid."

Peter Samuel Griffith grunted in acknowledgment.

I looked straight at the detective. "So if the murderer didn't leave by

the front door..."

Francis and I pulled the curtains back. Justin Ascham Raleigh's rooms looked inward over the quad. They were in a corner, where little light ventured from the illuminated pathway crossing the snow-cloaked lawn. Mindful of possible evidence, I opened my case and took out a pair of tight-fitting rubber gloves.

The latch on the window was open. When I gave the iron frame a tentative push it swung out easily. We poked our heads out like a pair of curious children at a fairground attraction. The wall directly outside was covered with wisteria creeper, its ancient gnarled branches twisted together underneath a thick layer of white ice crystals; it extended upwards for at least another two floors.

"As good as any ladder," Francis said quietly. "And I'll warrant there's at least a dozen routes in and out of Dunbar that avoid the lodgekeepers."

The detective took a look at the ancient creeper encircling the window. "I've heard that the gentlemen of Dunbar College do have several methods of allowing their lady friends to visit their rooms after the gates are locked."

"And as the gates weren't locked at the time of the murder, no one would have been using those alternative routes. The murderer would have got out cleanly,"

Francis said.

"If we're right, then this was a well planned crime," I said. If anything, that made it worse.

Francis locked his fingers together, as if wringing his hands.

He glanced back at the sheet-covered corpse. "And yet, the nature of the attack speaks more of a crime passionelle than of some cold plot. I wonder." He gazed back at the students. "Mr. Griffith we now know of. How do the rest of these bedraggled souls come to be here, Detective Pitchford?"

"They're Mr. Raleigh's closest friends. I believe Mr. Griffith phoned one as soon as he'd called the lodgekeeper."

"That was me," the other young man said. He had his arm thrown protectively round the girl, who was sobbing wretchedly.

"And you are?" Francis asked.

"Carter Osborne Kenyon. I was a good friend of Justin's; we had dinner together tonight."

"I see. And so you phoned the young lady here?"

"Yes. This is Bethany Maria Caesar, Justin's girlfriend. I knew she'd be concerned about him, of course."

"Naturally. So do any of you recall threats being made against Mr. Raleigh? Does he have an equivalent group of enemies, perhaps?"

"Nobody's ever threatened Justin. That's preposterous. And what's this to you, anyway? The police should be asking these questions."

The change in Francis's attitude was small but immediate, still calm but no longer so tolerant. And it showed. Even Carter Osborne Kenyon realized he'd made a big gaffe. It was the kind of switch that I knew I would have to perfect for myself if I ever hoped to advance through the family hierarchy.

"I am the Raleigh family's senior representative in Oxford," Francis said lightly. "While that might seem like an enviable sinecure from your perspective, I can assure you it's not all lunches and cocktail parties with my fellow fat old men doing deals that make sure the young work harder. I am here to observe the official investigation, and make available any resource our family might have that will enable the police to catch the murderer. But first, in order to offer that assistance I have to understand what happened, because we will never let this rest until that barbarian is brought to justice. And I promise that if it was you under that sheet, your family would have been equally swift in dispatching a representative. It's the way the world works, and you're old enough and educated enough to know that."

"Yeah, right," Carter Osborne Kenyon said sullenly.

"You will catch them, won't you?" Bethany Maria Caesar asked urgently.

Francis became the perfect gentleman again. "Of course we will, my dear. If anything in this world is a certainty, it's that. I will never rest until this is solved."

"Nor me," I assured her.

She gave both of us a small smile. A pretty girl, even through her tears and streaked make up; tall and lean, with blonde hair falling just below her shoulders.

Justin had been a lucky man. I could well imagine them hand in hand walking along some riverbank on a summer's eve. It made me even more angry that so much decency had been lost to so many young lives by this vile act.

"Thank you," she whispered. "I really loved him. We've been talking about a long-term marriage after we left Oxford . I can't believe this ... any of this."

Carter Osborne Kenyon hugged her tighter.

I made an effort to focus on the task in hand. "We'd like samples of every specimen the forensic team collects from here, fibers, hair, whatever," I told the detective. The basic procedures which had been reiterated time and again during my investigator courses at the family institute. Other strategies were invoked by what I saw. I lowered my voice, turning slightly away from the students so I could speak my mind freely, and spare them any further distress at this time. "And it might be a good idea to take blood samples from people in the immediate vicinity as well as any suspects you might determine. They should all be tested for alcohol or narcotics. Whoever did this was way off balance."

"Yes, sir," the detective said. "My team's already on its way. They know what they're doing."

"That's fine," Francis said. His look rebuked me. "If we could also sit in on the interviews, please."

"Certainly."

The Oxford City police station was less than a mile from Dunbar College . When Francis and I reached it at one o'clock there were few officers on duty. That changed over the next hour as Gareth Alan Pitchford assembled his investigator team with impressive competence. Officers and constables began to arrive, dressed in mussed uniforms, bleary-eyed, switching on the central heating in unused offices, calling down to stores for equipment. A couple of canteen staff came in and started brewing tea and coffee. The building's Major Crime Operations Center swung into action as Gareth Alan Pitchford made near continuous briefings to each new batch of his recruits. Secretaries began clacking away on typewriters;

detectives pinned large scale maps of Oxford on the wall; names were hurriedly chalked up on the blackboard, a confusing trail of lines linking them in various ways; and telephones built to a perpetual chorus of whistles.

People were brought in and asked to wait in holding rooms. The chief suspects, though no one was impolite enough to say it to their faces. Gareth Alan Pitchford soon had over thirty young men and women worrying away in isolation.

"I've divided them into two categories," he told the Operations Center . "Dunbar students sharing the same accommodation wing; physically close enough to have killed Raleigh , but for whom there is no known motive, just opportunity. And a batch of his closest friends. We're still waiting for the last one of them to arrive, but I gather the uniform division has not located him. First off, I want the doctor to collect blood samples from all of them before the interviews start; if this is a drug or alcohol induced crime we'll need to be quick to catch the evidence."

Standing discreetly at the back of the room, I watched the rest of the officers acknowledge this. It was as though they were willing that to be the solution.

Like me, they didn't want a world where one normal, unaffected person could do this to another.

"Wrong approach," Francis muttered quietly to me.

"In what way?" I muttered back.

"This slaying was planned; methodically and cleverly. Drugs or alcohol implies spur of the moment madness. An irrational act to which there would have been witnesses. You mark my words-there won't be a fingerprint on either the knife or the window."

"You may be right."

"When Pitchford starts the interviews, I want us to attend those with Justin's friends. Do I need to tell you why?"

"No." It was at times like this I both appreciated and resented the old man's testing. It was an oblique compliment that he thought I had the potential to succeed him eventually; but it was irritating in equal proportion that I was treated as the office junior. "Whoever did this had to know Justin, which means the friends are the only genuine

suspects."

"Glad to see all those expensive courses we sent you on haven't been totally wasted," Francis said. I heard a reluctant note of approval in his voice. "The only other suspect I can think of is a Short. They don't value life as much as we do."

I kept my face composed even though I could not help but regard him as an old bigot at heart. Blaming the Shorts for everything from poor harvests to a tire puncture was a prejudice harking back to the start of the Second Imperial Era, when the roots of today's families were grown amid the Sport Of Emperors. Our march through history, it would seem, isn't entirely noble.

The interview room was illuminated by a pair of hundred-watt bulbs in white ceramic shades. A stark light in a small box of a room. Glazed amber tiles decorated the lower half of the walls, adding to the chill atmosphere. The only door was a sturdy metal affair with a slatted grate halfway up.

Peter Samuel Griffith sat behind the table in a wooden chair, visibly discomforted by the surroundings. He was holding a small sterile gauze patch to the needle puncture in his arm where the police doctor had taken a sample of his blood. I used my pencil to make a swift note reminding myself to collect such samples for our family institute to review.

Detective Gareth Alan Pitchford and a female stenographer sat opposite Mr. Griffith while Francis and myself stood beside the door, trying to appear inconspicuous.

"The first thing which concerns me, obviously, is the timing of events," the detective said. "Why don't you run through them again for me, please?"

"You've heard it all before," Peter Samuel Griffith said. "I was working on an essay when I heard what sounded like an argument next door."

"In what way? Was there shouting, anything knocked about?"

"No. Just voices. They were muffled, but whoever was in there with Justin was disagreeing with him. You can tell, you know."

"Did you recognize the other voice?"

"No. I didn't really hear it. Whoever they were, they spoke pretty

quietly. It was Justin who was doing the yelling. Then he screamed. That was about half past eleven. I phoned the lodgekeepers."

"Immediately?"

"More or less, yes."

"Ah, now you see, Peter, that's my problem. I'm investigating a murder, for which I need hard facts; and you're giving me more or less. Did you phone them immediately? It's not a crime that you didn't. You've done the right thing, but I must have the correct details."

"Well, yeah ... I waited a bit. Just to hear if anything else happened. That scream was pretty severe. When I couldn't hear anything else, I got really worried and phoned down."

"Thank you, Peter. So how long do you think you waited?"

"Probably a minute, or so. I... I didn't know what to do at first; phoning the lodgekeepers seemed a bit drastic. I mean, it could just have been a bit of horsing around that had gone wrong, Justin wouldn't have wanted to land a chum in any trouble. He was a solid kind of chap, you know."

"I'm sure he was. So that would have been about, when ... ?"

"Eleven thirty-two. I know it was. I looked at the clock while I was calling the lodgekeepers."

"Then you phoned Mr. Kenyon straight away?"

"Absolutely. I did have to make two calls, though. He wasn't at his college, his roommate gave me a number. Couldn't have taken more than thirty seconds to get hold of him."

"What did you tell him?"

"Just that there was some sort of trouble in Justin's room, and the lodgekeepers were coming. Justin and Carter are good friends, best friends. I thought he'd want to know what was going on. I'd realized by then that it was serious."

"Most commendable. So after you'd made the phone call to Mr. Kenyon you went out into the corridor and waited, is that right?"

"Yes."

"How long would you say it was between the scream and the lodgekeepers arriving?"

"Probably three or four minutes. I'm not sure exactly, they arrived pretty quick once I got out into the corridor."

The detective turned round to myself and Francis. "Anything you want to ask?"

"No, thank you," Francis said before I could answer.

I have to say it annoyed me. The detective had missed points-like had there been previous arguments, how was he sure it was Justin who screamed, was there anything valuable in the room, which other students had been using the corridor and could confirm his whole story? I kept my silence, assuming Francis had good reason.

Next in was Carter Osborne Kenyon, who was clearly suffering from some kind of delayed shock. The police provided him with a mug of tea, which he clamped his hands around for warmth, or comfort. I never saw him drink any of it at any time during the interview.

His tale started with the dinner at the Orange Grove that evening, where Justin's other closest friends had gathered: Antony Caesar Pitt, Christine Jayne Lockett, and Alexander Stephan Maloney. "We did a lot of things together," Carter said. "Trips to the opera, restaurants, theater, games ... we even had a couple of holidays in France in the summer-hired a villa in the South. We had good times." He screwed his eyes shut, almost in tears. "Dear Mary!"

"So you'd known each other as a group for some time?" Gareth Alan Pitchford asked.

"Yes. You know how friendships are in college; people cluster together around interests, and class too, I suppose. Our families tend to have status. The six of us were a solid group, have been for a couple of years."

"Isn't that a bit awkward?"

"What do you mean?"

"Two girls, four men."

Carter gave a bitter laugh. "We don't have formal membership to the exclusion of everyone else. Girlfriends and boyfriends come and go, as

do other friends and acquaintances; the six of us were a core if you like. Some nights there could be over twenty of us going out together."

"So you'd known Justin for some time; if he could confide in anyone it would be you or one of the others?"

"Yeah."

"And there was no hint given, to any of you, that he might have been in trouble with somebody, or had a quarrel?"

"No, none."

"What about amongst yourselves-there must have been some disagreements?"

"Well, yes." Carter gave his tea a sullen glare, not meeting the detective's look. "But nothing to kill for. It was stupid stuff... who liked what play and why, books, family politics, restaurant bills, sports results, philosophy, science -we chewed it all over; that's the kind of thing which keeps every group alive and interesting."

"Name the worst disagreement Justin was currently involved in."

"Bloody hell!"

"Was it with you?"

"No!"

"Who then?"

Carter's hands tightened round the mug, his knuckles whitening. "Look, it's nothing really. It's always happening."

"What is?"

"Okay, you didn't hear this from me, but Antony likes to gamble. I mean, we all do occasionally-a day at the races, or an evening at a casino-just harmless fun, no big money involved. But with Antony, it's getting to be a problem. He plays cards with Justin. He's been losing quite heavily recently. Justin said it served him right, that Antony should pay more attention to statistics. He was a legal student, he should know better, that there is no such thing as chance."

"How much money?"

Carter shrugged. "I've no idea. You'll have to ask Antony . But listen, Antony isn't about to kill for it. I know Justin, he'd never allow it to get that far out of control."

"Fair enough," the detective said. "Do you know if Justin had anything worth stealing?"

"Something valuable?" Carter appeared quite perplexed by the idea. "No. We're all students. We're all broke. Oh, don't get me wrong, our families support us here; the allowance is adequate for the kind of life we pursue, but nothing more. Ask Antony ," he added sourly.

"I wasn't thinking in terms of cash, possibly an heirloom he kept in his room?"

"Nothing that I ever saw, and I've been in there a thousand times. I promise you, we're here only for our minds. Thoughts are our wealth. Which admittedly made Justin the richest of us all-his mind was absolutely chocka with innovative concepts. But nothing a thief could bung in his swag bag." He pantomimed a catching thought, his beefy hands flapping round his head.

"I thought Justin was an astrophysicist," Francis said.

"He was."

"So what ideas could he have that were valuable?"

"Dear Mary." Carter shot Francis a pitying look. "Not industrial ideas, machinery and trinkets for your factories. Original thoughts. Pure science, that was his playground. He was hinting that he'd come up with one fairly radical notion. His guaranteed professorship, he called it."

"Which was?"

"I haven't a clue. He never really explained any of his projects to us. Justin could be very conservative, in both senses. The only thing I know is, it involved spectrography ... you know, picking out the signature of specific elements by their emission spectrum. He was running through a collection of photographs from the observatory archives. I could help him a little with that-spectrography is simple physics. We were speculating on how to improve the process, speed it up with automation, some kind of electromechanical contraption. But we never got past a few talks in the bar."

"Did he write any of this project down?" the detective asked. "Keep notes, a file?"

"Not as far as I know. As I said, a fanciful speculation in its early stages. Talk to any science stream student and you'll get something similar; we all have our pet theories that will rock the universe if they're proven."

"I see." The detective dabbed the tip of his pencil on his lips. "How long had Mr. Raleigh and Miss Caesar been an item?"

"Oh, for at least a year. 'Bout time too, they'd been flirting ever since I met them. Bit of a relief when they finally got it together, know what I mean? And they were so well suited. It often helps when you're friends for a while first. And they're both bright sparks." He smiled ruefully. "There. If you want a qualifier for our group, I suppose that's it. We're all top of the league in what we do. Except for dear old Chris, of course. But she's still got the intellect. Gives as good as she gets every time."

Gareth Alan Pitchford rifled through his notes. That'll be Christine Jayne Lockett?"

"Yeah. She's our token artist. The rest of us are science stream, apart from Antony ; he's law. Chris dropped out of the formal route after she got pregnant. Loves life in the garret. Thinks it's romantic. Her family don't share the opinion, but she gets by."

"What is your field of study? Francis asked.

Carter glanced up, surprised, as if he'd forgotten the two of us were there. "Nuclear engineering. And a hell of a field it is, too. Do you know the Madison team in Germany is only a few years from building a working atomic reactor? Once that happens and we build commercial reactors to generate electricity, the world will never burn another lump of coal ever again. Isn't that fantastic! It's the science of the future." He stopped, apparently in pain. "That's what Justin and I always argued about. Damn!"

"Justin disagreed with you about atomic power? I thought he was an astrophysicist."

"He was. That's why he disagreed. Damn silly stargazer. He kept insisting that fusion was the way forward, not fission. That one day we'd simply tap the sun's power directly. What a beautiful dream. But that was Justin for you. Always went for the high concept."

"Can you tell me roughly what time you got the phone call from Mr. Griffin telling you something was wrong?" the detective asked.

"That's easy enough. It was just after half past eleven."

"I see. And where were you?"

Carter's face reddened slightly. "I was with Chris in her studio. We went back there together after the meal."

"I see. Was that usual?"

"Sometimes I'd go there, yeah. Nothing unusual about it."

"What exactly is your relationship with Miss Lockett? Her number was the first which your roommate gave to Mr. Griffith."

"We have a thing. It's casual. Not serious at all. Is this relevant?"

"Only in that it gives you and her a definite location at the time of the murder."

"Location ..." His eyes widened. "You mean an alibi."

"Yes. Providing Miss Lockett confirms it."

"Bloody hell, you're serious, aren't you?"

"Absolutely. So tell me what you did after receiving the phone call from Mr. Griffith."

"I went straight to Dunbar . Hailed a cab. It took about twenty minutes. They'd found the body by that time of course. I think you were there yourself by then."

"I probably was."

"You said you went straight to Dunbar College from Miss Lockett's studio," I said. "When did you call Miss Caesar?"

"As soon as I got to Dunbar . The police were everywhere, so I knew it was a real mess. I used Peter's phone before I went into Justin's room."

"Where was she?"

"At her room in Offers ... Uffington College ."

"And she arrived straight away?" Gareth Alan Pitchford asked.

"You know she did. You were the one who let us in to Justin's rooms, remember? Uffers is only just down the road from Dunbar , it's less than four minutes' walk away. I expect she ran."

"Okay." The detective closed his notebook. "Thank you very much. We'll need to talk to you again, of course. I'll have a car run you home."

"I'll stay, thanks. I want to be with the others when you've finished interviewing them."

"Of course."

It was Antony Caesar Pitt who followed Carter into the interview room. By that time it was close to three o'clock in the morning. A Caesar family representative came in with him; Neill Heller Caesar. Younger than Francis, dressed in a very expensive gray business suit. There was no way of telling what an inconsiderate hour it was from his deportment; he was shaved, wide awake, and friendly with the police. I envied that ability to insinuate himself into the situation as if his presence was an essential component of the investigation. Another goal to aim for. People like us have to be as smooth as a beach stone.

The world calls us representatives, but negotiators would be more accurate. We're the deal makers, the oil in the cogs of the Roman Congress. Families, that is the big ones like mine who originated from the Sport of Emperors, can hardly venture into physical conflict when we have a dispute amongst ourselves. Violence is going the same way as Shorts, bred out of our existence. Instead, you have us.

Families have their own internal codes of behavior and conduct, while the Roman Congress provides a framework for overall government. So when two families collide over anything-a new invention, access to fresh resources-people like Francis and Neill Heller Caesar sit down together and thrash out an agreement about distribution and equal rights. Two hundred years ago, when the Americas were opened up, the major disputes were over what territories each family should have to settle, which is when our profession matured. These days, the big quarrels mostly concerns economic matters-inevitable given the way the whole world is hurtling headfirst into scientific industrialization.

But representation of family interests also goes right down to a personal individual level. To put it in First Era crudity, we were there that night to make damn sure the police caught whoever killed one of

us. While Neill Heller Caesar was there to ensure his family members weren't pressured into confessing. Unless of course they were guilty. For all our differences, no family would tolerate or cover up for a murderer.

Neill Heller Caesar shook hands with both of us, giving me an equal amount of respect. As flattery went, I have to admit he scored a partial success.

"Hope you don't mind my sitting in," he said pleasantly. "There are two of our flock involved so far. Best to make sure they conduct themselves correctly now. Could save a lot of time later on. I'm sure everyone wants this appalling incident cleared up as soon as possible. My condolences, by the way."

"Thank you," Francis said. "I'm most gratified that you're here. The more people working on this investigation, the faster it will be solved. Hope you can manage the crowding. I don't believe this room was built with such a large audience in mind."

"Not a problem." Neill Heller Caesar sat down next to Antony , giving the young man a reassuring smile. Antony needed the gesture. He had obviously had quite a night; his tie was unknotted, hanging around his collar, his jacket was crumpled, and there were several stains on the fabric. Apart from that he came over as perfectly average, a short man with broad shoulders, who kept himself fit and healthy.

"You had dinner with Mr. Raleigh and your other friends this evening?" Gareth Alan Pitchford asked.

"That's right." Antony Caesar Pitt's voice was strained, attempting defiant contempt. He couldn't quite pull it off, lacking the internal confidence to make it real. He searched round his jacket pockets and pulled out a silver cigar case. Selecting one of the slim cigars and lighting it was another attempt at conveying calm nerves. He took a deep drag.

"I understand the dinner finished around ten o'clock. Where did you go after that?"

"To some friends."

"And they are ... ?"

"I'd rather not say, actually."

The detective smiled thinly. "I'd rather you did."

Neill Heller Caesar put a friendly hand on Antony's leg. "Go ahead." It was an order more forceful than any the detective could ever make.

Antony exhaled a thick streamer of smoke. "It's a club I go to occasionally. The Westhay."

"On Norfolk Street?"

"Yes."

"Why were you there?"

"It's a club. Why does anyone go to a club?"

"For a dance and a pleasant evening, usually. But this is different. People go to the Westhay, Mr. Caesar, because there's an unlicensed card game there most evenings. I understand you're a gambling man."

"I enjoy a flutter. Who doesn't? It's not as if having a game with friends is a major crime."

"This is not the vice division; I don't care about your personal shortcomings, I'm investigating the murder of your friend. How long were you there?"

Antony chewed the cigar end. "I finished just after one. They wiped me out, and believe me you don't ask for credit at the Westhay. It's strictly cash only. I walked back to my college and your constables were waiting for me. But look, even if I give you the names of the guys I was playing with it won't do you any good. I only know first names, and they're not going to admit even being there."

"That's not your concern right now, Mr. Pitt. I gather you and Mr. Raleigh played cards on a regular basis."

"For Mary's sake! I wouldn't kill Justin over a couple of hundred pounds."

"The detective spread his hands wide. "Did I say you would?"

"You implied it."

"I'm sorry if that's the impression you received. Do you know of anyone who had any kind of dispute with Mr. Raleigh?"

"No. Nobody. Justin was genuinely a great guy."

The detective leaned back in his chair. "So everyone tells us. Thank you, Mr. Pitt. We will probably need to ask you more questions at some other time. Please don't leave the city."

"Sure." Antony Caesar Pitt straightened his jacket as he got up, and gave Neill Heller Caesar a mildly annoyed glance.

One of the station's secretaries came in as Antony left. She handed a clipboard to Gareth Alan Pitchford. His expression of dismay deepened as he flicked through the three flimsy sheets of paper which it held.

"Bad news?" Francis inquired.

"It's the preliminary forensic report."

"Indeed. Were there any fingerprints on the knife?"

"No. Nor were there any on the window latch. The site team is now dusting all three rooms. They'll catalog each print they find."

"And work through a process of elimination," Francis said. "The only trouble with that is, the prints belonging to all Justin's friends will quite legitimately be found in there."

"That's somewhat premature, isn't it?" Neill Heller Caesar said. "You've no idea how many unknown prints they'll find at this stage."

"You're right, of course."

I could tell how troubled Francis was. I don't know why. He must have been expecting negatives like that in the report: I certainly was.

"You have a problem with it?" Neill Heller Caesar asked him.

"No. Not with the report. It's the way Justin's friends are all saying the same thing: he had no enemies. Indeed, why should he? A young man at university, what could he have possibly done to antagonize someone so?"

"Obviously something."

"But it's so out of character. Somebody must have noticed the reason."

"Perhaps they did, and simply aren't aware of it."

Francis nodded reluctantly. "Maybe." He gave the detective a glance. "Shall we continue."

Interestingly from my point of view, Neill Heller Caesar elected to stay in the interview room. Maloney didn't have any family representative sit in with him. Not that the Maloney's lacked influence; he could have had one there with the proverbial click of a finger. It made me wonder who had made the call to Neill. I scribbled a note to ask the police later. It could be guilt, or more likely, anxiety.

Alexander Stephan Maloney was by far the most nervous of the interviewees we'd seen. I didn't consider it to be entirely due to his friend being murdered. Something else was bothering him. The fact that anything could distract him at such a time I found highly significant. The reason became apparent soon enough. He had a very shaky alibi, claiming he was working alone in one of the laboratories in the Leigh-field chemistry block.

"Number eighteen," he said. "That's on the second floor."

"And nobody saw you there?" Gareth Alan Pitchford asked, a strong note of skepticism in his voice.

"It was quarter to eleven at night. Nobody else is running long-duration experiments in there right now. I was alone."

"What time did you get back to your rooms?"

"About midnight. The college lodgekeepers can confirm that for you."

"I'm sure they will. How did you get back from the laboratory to the college?"

"I walked. I always do unless the weather is really foul. It gives me the opportunity to think."

And you saw no one while you were walking?"

"Of course I saw people. But I don't know who any of them were. Strangers on a street going home to bed. Look, you can ask my professor about this. He might be able to confirm I was there when I said I was."

"How so?"

"We're running a series of carbon accumulators, they have to be

adjusted in a very specific way, and we built that equipment ourselves. There are only five people in the world who'd know what to do. If he looks at it in the morning he'll see the adjustments were made."

"I'd better have a word with him, then, hadn't I?" the detective said. He scrawled a short note on his pad. "I've asked all your friends this question, and got the same answer each time. Do you know if Justin had any enemies?"

"He didn't. Not one."

There was silence in the interview room after he left. All of us were reflecting on his blatant nerves, and his nonexistent alibi. I kept thinking it was too obvious for him to have done it. Of course not all the suspects would have alibis: they didn't part after their dinner believing they'd need one. Ask me what I was doing every night this past week, and I'd be hard pressed to find witnesses.

Christine Jayne Lockett bustled into the interview room. I say bustled because she had the fussy motions that put me in mind of some formidable maiden aunt.

When she came into a room everyone knew it. When she spoke, she had the tone and volume which forced everyone to listen. She was also quite attractive, keeping her long hair in a high style. Older than the others, in her mid twenties, which gave her a certain air. Her lips always came to rest in a cheerful grin. Even now, in these circumstances, she hadn't completely lost her bonhomie.

"And it started out as such a beautiful day," she said wistfully as she settled herself in the chair. Several necklaces chinked and clattered at the motion, gold pagan charms and crucifixes jostling against each other. She put a small poetry book on the table. "Do you have any idea who did it, yet?"

"Not as such," Gareth Alan Pitchford said.

"So you have to ask me if I do. Well I'm afraid I have no idea. This whole thing is so incredible. Who on earth would want to kill poor Justin? He was a wonderful man, simply wonderful. All of my friends are. That's why I love them, despite their faults. Or perhaps because of them."

"Faults?"

"They're young. They're shallow. They have too many opinions. They're easily hurt. Who could resist the company of such angels?"

"Tell me about Justin. What faults did he have?"

"Hubris, of course. He always thought he was right. I think that's why dear Bethany loved him so much. That First Era saying: 'differences unite.' Not true. She's a strong-willed girl as well. How could a strong person ever be attracted to a weak one-tell me that. They were so lucky to have found each other. Nobody else could win her heart, not for lack of trying you understand."

"Really?" Gareth Alan Pitchford couldn't shade the interest in his voice. "She had admirers?"

"You've seen her. She's gorgeous. A young woman of beauty, complemented by a fiercely sharp mind. Of course she had admirers, by the herd."

"Do you have names?"

"Men would ask to buy her a drink every time we went into a tavern. But if you mean persistent ones, ones that she knew ... Alexander and Carter were both jealous of Justin. They'd both asked her out before she and Justin became lovers. It always surprised me that they managed to remain friends. A man's ego is such a weak appendage, don't you think."

"I'm sure. Did this jealousy last? Were either of them still pursuing her?"

"Not actively. We were all friends, in the end. And nothing I saw, no wistful gazes, or pangs of lust, would cause this. I do know my friends, Detective Pitchford, and they are not capable of murder. Not like this."

"Who is, then?"

"I have no idea. Somebody from the First Imperial Era? One might still be alive."

"If so, I've not heard of them, but I'll inquire. Do you know if Justin had antagonized anyone? Not necessarily recently," he added, "but at any time since you knew him."

"His self-confidence put a lot of people off. But then all of us have that quality. It's not a characteristic which drives someone to murder."

"Mr. Kenyon claims he was with you after the dinner at the Orange Grove. Is this true?"

"Perfectly true. We went back to my apartment. It was after ten, and baby-sitters are devilishly expensive in this city."

"The baby-sitter can confirm this?"

"Your officers already took her statement. We arrived back at about quarter past ten."

"And after that? You were together for the rest of the night?"

"Right up until Carter got the phone call, yes. We drank some wine, I showed him my latest piece. We talked. Not for long, mind you. We hadn't even got to bed before he dashed off." Her fingers stroked at the book's leather cover. "What a dreadful, dreadful day."

Gareth Alan Pitchford glanced round at all of us after Christine left, his expression troubled. It was as if he was seeking our permission for the interview we all knew couldn't be avoided. Neill Heller Caesar finally inclined his head a degree.

Bethany Maria Caesar had regained some composure since I saw her in Justin's rooms. She was no longer crying, and her hair had been tidied up. Nothing could be done about her pallor, nor the defeated slump of her shoulders. A sorrowful sight in one so young and vibrant.

Neill Heller Caesar hurriedly offered her a chair, only just beating me to it. She gave him a meek smile and lowered herself with gentle awkwardness, as if her body weighed more than usual.

"I apologize for having to bring you in here, Miss Caesar," the detective said. "I'll be as brief as possible. We just have a few questions. Formalities."

"I understand." She smiled bravely.

"Where were you at ten thirty this evening?"

"I'd gone back to my rooms at Uffington after the meal. There was some lab work which I needed to type up."

"Lab work?"

"I'm taking biochemistry. It's a busy subject right now, so much is opening up to us. It won't be long now before we understand the

genetic molecule; that's the heart of life itself. Oh. I'm sorry. I'm rambling. It just takes my thought away from ..."

This time I was the one who chivalrously offered a glass of water. She took it gratefully, a small flustered smile touching her lips. "Thank you. I suppose I must have got to Uffers just after ten. The lodgekeepers should be able to tell you the exact time. They sign us in at night."

"Of course. Now what about Justin. You were closest to him, did you know if he was embroiled in any kind of antagonism with someone? Some wild incident? A grudge that wouldn't go away?"

"If you'd ever met Justin you wouldn't have to ask that. But no ... he hadn't annoyed anyone. He wasn't the type; he was quiet and loved his subject. Not that we were hermits. We went out to parties, and he played a few games for the college, but not at any level which counted. But we were going to make up for all that time apart after ..." She tugged a handkerchief out of her sleeve and pressed it against her face. Tears leaked out of tightly closed eyes.

"I believe that's sufficient information for now," Neill Heller Caesar said, fixing the detective with a pointed gaze. Gareth Alan Pitchford nodded his acceptance, clearly glad of the excuse to end the questioning. Neill Heller Caesar put his arm round Bethany's trembling shoulders, and helped guide her from the interview room.

"Not much to go on," the detective muttered gloomily once she was outside. "I'd welcome any suggestions." He looked straight at Francis, who was staring at the closed door.

"Have patience. We simply don't have enough information yet. Though I admit to being mystified as to any possible motive there could be for ending this young man's life in such a terrifying way. We do so desperately need to uncover what it was that Justin encountered which led to this."

"I have a good team," the detective said, suddenly bullish. "You can depend on our investigation to uncover the truth."

"I don't doubt it," Francis said with a conciliatory smile. "I think my colleague and I have seen enough for tonight. Why don't we reconvene tomorrow-or rather later this morning, to review the case so far. The remaining interviews should be over by then, and forensic ought to have finished with Justin's room."

"As you wish," the detective said.

Francis said nothing further until we were safely strapped up in his car and driving away from the station. "So, my boy, first impressions? I often find them strangely accurate. Human instinct is a powerful tool."

"The obvious one is Alexander," I said. "Which in itself would tend to exclude him. It's too obvious. Other than that, I'm not sure. None of them has any apparent motive."

"An interesting comment in itself."

"How so?"

"You-or your subconscious-haven't included anyone else on your suspect list."

"It must be someone he knows," I said, a shade defensively. "If not his immediate coterie, then someone else who was close. We can start to expand the list tomorrow."

"I'm sure we will," Francis said.

It seemed to me that his mind was away on some other great project or problem. He sounded so disinterested.

MURDER. It was the banner scored big and bold across all the street corner newspaper placards, most often garnished with adjectives such as foul, brutal, and insane. The vendors shouted the word in endless repetition, their scarves hanging loosely from their necks as if to give their throats the freedom necessary for such intemperate volume. They waved their lurid journals in the air like some flag of disaster to catch the attention of the hapless pedestrians.

Francis scowled at them all as we drove back to the police station just before lunchtime. The road seemed busier than usual, with horse-drawn carriages and carts jostling for space with cars. Since the law banning combustion engines, electric vehicles were growing larger with each new model; the newest ones were easily recognizable, with six wheels supporting long bonnets that contained ranks of heavy batteries.

"Those newspapers are utter beasts," he muttered. "Did you hear, we've had to move Justin's parents from their home so they might

grieve in peace? Some reporter tried to pretend he was a relative so he could get inside for an interview. Must be a Short. What is the world degenerating into?"

When we arrived at the station it was besieged with reporters. Flashbulbs hissed and fizzled at everyone who hurried in or out of the building. Somehow Francis's angry dignity managed to clear a path through the rabble. Not that we escaped unphotographed, or unquestioned. The impertinence of some was disgraceful, shouting questions and comments at me as if I were some circus animal fit only to be provoked. I wished we could have taken our own photographs in turn, collecting their names to have them hauled before their senior editors for censure.

It was only after I got inside that I realized our family must have interests in several of the news agencies involved. Commerce had become the driving force here, overriding simple manners and decency.

We were shown directly to Gareth Alan Pitchford's office. He had the Venetian blinds drawn, restricting the sunlight and, more importantly, the reporters' view inside. Neill Heller Caesar was already there. He wore the same smart suit and shirt that he'd had on for the interviews. I wondered if he'd been here the whole time, and if we'd made a tactical error by allowing him such freedom. I judged Francis was making the same calculation.

The detective bade us sit, and had one of his secretaries bring round a tray with fresh coffee.

"You saw the press pack outside," he said glumly. "I've had to assign officers to escort Justin's friends."

"I think we had better have a word," Francis said to Neill Heller Caesar. "The editors can be relied upon to exert some restraint."

Neill Heller Caesar's smile lacked optimism. "Let us hope so."

"What progress?" I inquired of the detective.

His mood sank further. "A long list of negatives, I'm afraid. I believe it's called the elimination process. Unfortunately, we're eliminating down to just about nothing. My team is currently piecing together the movements of all the students at Dunbar preceding the murder, but it's not a promising avenue of approach. There always seems to be several people in the corridor outside Mr. Raleigh's room. If anyone had come

out, they would have been seen. The murderer most likely did use the window as an exit. Forensic is going over the wisteria creeper outside, but they don't believe it to be very promising."

"What about footprints in the snow directly underneath the window?"

"The students have been larking about in the quad for days. They even had a small football game during that afternoon, until the lodgekeepers broke it up. The whole area has been well trampled down."

"What about someone going into the room?" Francis asked. "Did the students see that?"

"Even more peculiar," the detective admitted. "We have no witness of anyone other than Mr. Raleigh going in."

"He was definitely seen going in, then?" I asked.

"Oh yes. He chatted to a few people in the college on his way up to his room. As far as we can determine, he went inside at about ten past ten. That was the last anyone saw him alive."

"Did he say anything significant to any of those people he talked to? Was he expecting a guest?"

"No. It was just a few simple greetings to his college mates, nothing more. Presumably the murderer was waiting for him."

"Justin would have kept those windows closed yesterday," I said. "It was freezing all day. And if the latch was down, they'd be very difficult to open from the outside, especially by anyone clinging to the creeper. I'm sure a professional criminal could have done it, but not many others."

"I concur," Francis said. "It all points to someone he knew. And knew well enough to open a window for them to get in."

"That's a very wild assumption," Neill Heller Caesar said. "Someone could simply have gone to his room hours earlier and waited for him. There would have been several opportunities during the day when there was nobody in that corridor outside. I for one refuse to believe it was in use for every second of every minute during the entire afternoon and evening."

"The method of entry isn't too relevant at this time," the detective said.

"We still have absolutely no motive for the crime." I resisted giving Francis a glance. I have to say I considered the method of entry to be extremely relevant. A professional breakin opened up all sorts of avenues. As did Justin opening the window for a friend.

"Very well," Francis said levelly. "What is your next step?"

"Validating the alibis of his closest friends. Once I'm satisfied that they are all telling the truth, then we'll get them back in for more extensive interviews. They knew him best, and one of them may know something without realizing it. We need to review Mr. Raleigh's past week, then month. Six months if that's what it takes. The motive will be there somewhere. Once we have that, we have the murderer. How they got in and out ceases to be an issue."

"I thought all the alibis were secure, apart from Maloney's," Neill Heller Caesar said.

"Maloney's can probably be confirmed by his professor," the detective said. "One of my senior detectives is going out to the chemistry laboratory right away. Which leaves Antony Caesar Pitt with the alibi most difficult to confirm. I'm going to the Westhay Club myself to see if it can be corroborated."

"I'd like to come with you," I said.

"Of course."

"I'll go to the chemistry laboratory, if you don't mind," Neill Heller Caesar said. Louche (??), I thought. We swapped the briefest of grins.

Unless you knew exactly where to go, you'd never be able to locate the Westhay. Norfolk Street was an older part of Oxford, with buildings no more than three or four stories. Its streetlights were still gas, rather than the sharp electric bulbs prevalent through most of the city. The shops and businesses catered for the lower end of the market, while most of the houses had been split into multiple apartments, shared by students from minor families, and young manual workers. I could see that it would be redeveloped within fifty years. The area's relative lack of wealth combined with the ever-rising urban density pressure made that outcome inevitable.

The Westhay's entrance was a wooden door set between a bicycle shop and bakery. A small plaque on the wall was the only indication it existed.

Gareth Alan Pitchford knocked loudly and persistently until a man pulled back a number of bolts and thrust an unshaven face round the side. It turned out he was the manager. His belligerence was washed away by the detective's badge, and we were reluctantly allowed inside.

The club itself was upstairs, a single large room with bare floorboards, its size decrying a grander purpose in days long gone. A line of high windows had their shutters thrown back, allowing broad beams of low winter sunlight to shine in through the grimy, cracked glass. Furniture consisted of sturdy wooden chairs and tables, devoid of embellishments like cushioning. The bar ran the length of one wall, with beer bottles stacked six deep on the mirrored shelving behind. A plethora of gaudy labels advertised brands which I'd never heard of before. In front of the bar, an old woman with a tight bun of iron-gray hair was sweeping the floor without visible enthusiasm. She gave us the most fleeting of glances when we came in, not even slowing her strokes.

The detective and the manager began a loud argument about the card game of the previous evening, whether it ever existed and who was taking part. Gareth Alan Pitchford was pressing hard for names, issuing threats of the city licensing board, and immediate arrest for the suspected withholding of information, in order to gain a degree of compliance.

I looked at the cleaning woman again, recalling one of my lectures at the investigatory course: a line about discovering all you need to know about people from what you find in their rubbish. She brushed the pile of dust she'd accrued into a tin pan, and walked out through a door at the back of the bar. I followed her, just in time to see her tip the pan into a large corrugated metal bin. She banged the lid down on top.

"Is that where all the litter goes?" I asked.

She gave me a surprised nod.

"When was it emptied last?"

"Two days ago," she grunted, clearly thinking I was mad.

I opened my attache case, and pulled on some gloves. Fortunately the bin was only a quarter full. I rummaged round through the filthy debris it contained. It took me a while sifting through, but in among the cellophane wrappers, crumpled paper, mashed cigarettes ends,

shards of broken glass, soggy beer mats, and other repellent items, I found a well-chewed cigar butt. I sniffed tentatively at it. Not that I'm an expert, but to me it smelled very similar to the one which Antony Caesar Pitt had lit in the interview room. I dabbed at it with a forefinger. The mangled brown leaves were still damp.

I dropped the cigar into one of my plastic bags, and stripped my gloves off. When I returned to the club's main room, Gareth Alan Pitchford was writing names into his notebook; while the manager wore the countenance of a badly frightened man.

"We have them," the detective said in satisfaction. He snapped his notebook shut.

I took a train down to Southampton the following day. A car was waiting for me at the station. The drive out to the Raleigh family institute took about forty minutes.

Southampton is our city, the same way Rome belongs to the Caesars, or London to the Percys. It might not sprawl on such grand scales, or boast a nucleus of Second Era architecture, but it's well-ordered and impressive in its own right. With our family wealth coming from a long tradition of seafaring and merchanting, we have built it into the second largest commercial port in England . I could see large ships nuzzled up against the docks, their stacks churning out streamers of coal smoke as the cranes moved ponderously beside them, loading and unloading cargo.

More ships were anchored offshore, awaiting cargo or refit. It had only been two years since I was last in Southampton, yet the number of big ocean-going passenger ships had visibly declined since then. Fewer settlers were being ferried over to the Americas , and even those members of families with established lands were being discouraged. I'd heard talk at the highest family councils that the overseas branches of the families were contemplating motions for greater autonomy. Their population was rising faster than Europe 's, a basis to their claim for different considerations. I found it hard to believe they'd want to abandon their roots. But that was the kind of negotiation gestating behind the future's horizon, one that would doubtless draw me in if I ever attained the levels I sought.

The Raleigh institute was situated several miles beyond the city boundaries, hugging the floor of a wide rolling valley. It's the family's oldest estate in England , established right at the start of the Second Era. We were among the first families out on the edge of the Empire's

hinterlands to practice the Sport of Emperors. The enormous prosperity and influence we have today can all be attributed to that early accommodation.

The institute valley is grassy parkland scattered with trees, extending right up over the top of the valley walls. At its heart are more than two dozen beautiful ancient stately manor houses encircling a long lake, their formal gardens merging together in a quilt of subtle greens. Even in March they retained a considerable elegance, their designers laying out tree and shrub varieties in order that swathes of color straddled the land whatever the time of year.

Some of the manors have wings dating back over nine hundred years, though the intervening time has seen them accrue new structures at a bewildering rate until some have become almost like small villages huddled under a single multifaceted roof. Legend has it that when the last of the original manors was completed, at least twelve generations of Raleighs lived together in the valley. Some of the buildings are still lived in today. For indeed I grew up in one; but most have been converted to cater for the demands of the modern age, with administration and commerce becoming the newest and greediest residents.

Stables and barns contain compartmentalized offices populated by secretaries, clerks, and managers. Libraries have undergone a transformation from literacy to numeracy, their leather-bound tomes of philosophy and history replaced by ledgers and records. Studies and drawing rooms have become conference rooms, while more than one chapel has become a council debating chamber. Awkley Manor itself, built in the early fourteen hundreds, has been converted into a single giant medical clinic, where the finest equipment which science and money can procure tends to the senior elders.

The car took me to the carved marble portico of Hewish Manor, which now hosted the family's industrial science research faculty. I walked up the worn stone steps, halting at the top to take a look round. The lawns ahead of me swept down to the lake, where they were fringed with tall reeds. Weeping willows stood sentry along the shore, their denuded branches a lacework of brown cracks across the white sky. As always a flock of swans glided over the black waters of the lake.

The gardeners had planted a new avenue of oaks to the north of the building, running it from the lake right the way up the valley. It was the first new greenway for over a century. There were some fifty of them in the valley all told, from vigorous century-old palisades, to

lines of intermittent aged trees, their corpulent trunks broken and rotting. They intersected each other in a great meandering pattern of random geometry, as if marking the roads of some imaginary city. When I was a child, my cousins and I ran and rode along those arboreal highways all summer long, playing our fantastical games and lingering over huge picnics.

My soft sigh was inevitable. More than anywhere, this was home to me, and not just because of a leisurely childhood. This place rooted us Raleighs.

The forensic department was downstairs in what used to be one of the wine vaults. The arching brick walls and ceiling had been cleaned and painted a uniform white, with utility tube lights running the length of every section. White-coated technicians sat quietly at long benches, working away on tests involving an inordinate amount of chemistry lab glassware.

Rebecca Raleigh Stothard, the family's chief forensic scientist, came out of her office to greet me. Well into her second century, and a handsome woman, her chestnut hair was only just starting to lighten towards gray. She'd delivered an extensive series of lectures during my investigatory course, and my attendance had been absolute, not entirely due to what she was saying.

I was given a demure peck on the cheek, then she stepped back, still holding both of my hands, and looked me up and down. "You're like a fine wine, Edward," she said teasingly. "Maturing nicely. One decade soon, I might just risk a taste."

"That much anticipation could prove fatal to a man."

"How's Myriam?"

"Fine."

Her eyes flashed with amusement, "A father again. How devilsome you are. We never had boys like you in my time!"

"Please. We're still very much in your time."

I'd forgotten how enjoyable it was to be in her company. She was so much more easygoing than dear old Francis. However, her humor faded after we sat down in her little office.

"We received the last shipment of samples from the Oxford police this

morning," she said. "I've allocated our best people to analyse them."

"Thank you."

"Has there been any progress?"

"The police are doing their damndest, but they've still got very little to go on at this point. That's why I'm hoping your laboratory can come up with something for me, something they missed."

"Don't place all your hopes on us. The Oxford police are good. We only found one additional fact that wasn't in their laboratory report."

"What's that?"

"Carter Osborne Kenyon and Christine Jayne Lockett were imbibing a little more than wine and spirits that evening."

"Oh?"

"They both had traces of cocaine in their blood. We ran the test twice, there's no mistake."

"How much?"

"Not enough for a drug induced killing spree, if that's what you're thinking. They were simply having a decadent end to their evening. I gather she's some sort of artist?"

"Yes."

"Narcotic use is fairly common amongst the more Bohemian sects, and increasing."

"I see. Anything else?"

"Not a thing."

I put my attache case on my knees, and flicked the locks back. "I may have something for you." I pulled the bag containing the cigar butt from its compartment.

"I found this in the Westhay Club, I think it's Antony Caesar Pitt's. Is there any way you can tell me for sure?"

"Pitt's? I thought his alibi had been confirmed?"

"The police interviewed three people, including the manager of the Westhay, who all swear he was in there playing cards with them."

"And you don't believe them?"

"I've been to the Westhay, I've seen the manager and the other players. They're not the most reliable people in the world, and they were under a lot of pressure to confirm whether he was there or not. My problem is that if he was there that evening the police will thank them for their statement and their honesty and let them go. If he wasn't, there could be consequences they'd rather avoid. I know that sounds somewhat paranoid, but he really is the only one of the friends who had anything like a motive. In his case, the proof has to be absolute. I'd be betraying my responsibility if I accepted anything less."

She took the bag from me, and squinted at the remains of the cigar which it contained.

"It was still damp with saliva the following morning," I told her. "If it is his, then I'm prepared to accept he was in that club."

"I'm sorry, Edward, we have no test that can produce those sort of results. I can't even give you a blood type from a saliva sample."

"Damn!"

"Not yet, but one of my people is already confident he can determine if someone has been drinking from a chemical reaction with their breath. It should deter those wretched cab drivers from having one over the eight before they take to the roads if they know the police can prove they were drunk on the spot. Ever seen a carriage accident? It's not nice. I imagine a car crash is even worse."

"I'm being slow this morning. The relevance being?"

"You won't give up. None of us will, because Justin was a Raleigh, and he deserves to rest with the knowledge that we will not forget him, no matter how much things change. And change they surely do. Look at me, born into an age of leisured women, at least those of my breeding and status. Life was supposed to be a succession of grand balls interspersed with trips to the opera and holidays in provincial spa towns. Now I have to go out and earn my keep."

I grinned. "No you don't."

"For Mary's sake, Edward; I had seventeen fine and healthy children

before my ovaries were thankfully exhausted in my late nineties. I need something else to do after all that child rearing. And, my dear, I always hated opera. This, however, I enjoy to the full. I think it still shocks mummy that I'm out here on the scientific frontier. But it does give me certain insights. Come with me."

I followed her the length of the forensic department. The end wall was hidden behind a large freestanding chamber made from a dulled metal. A single door was set in the middle, fastened with a heavy latch mechanism. As we drew closer I could hear an electrical engine thrumming incessantly. Other harmonics infiltrated the air, betraying the presence of pumps and gears.

"Our freezer," Rebecca announced with chirpy amusement.

She took a thick fur coat from a peg on the wall outside the chamber, and handed me another.

"You'll need it," she told me. "It's colder than those fridges which the big grocery stores are starting to use. A lot colder."

Rebecca told the truth. A curtain of freezing white fog tumbled out when she opened the door. The interior was given over to dozens of shelves, with every square inch covered in a skin of hard white ice. A variety of jars, bags, and sealed glass dishes were stacked up. I peered at their contents with mild curiosity before hurriedly looking away. Somehow, scientific slivers of human organs are even more repellent than the entirety of flesh.

"What is this?" I asked.

"Our family's insurance policy. Forensic pathology shares this freezer with the medical division. Every biological unknown we've encountered is in here.

One day we'll have answers for all of it."

"And one day the Borgias will leave the Vatican ," I said automatically.

Rebecca placed the bag on a high shelf, and gave me a confident smile. "You'll be back."

TWO

Manhattan City HO 1853

It was late afternoon as the SST came in to land at Newark aerodrome. The sun was low in the sky, sending out a red gold light to soak the skyscrapers.

I pressed my face to the small port, eager for the sight. The overall impression was one of newness, under such a light it appeared as though the buildings had just been erected. They were pristine, flawless.

Then we cruised in over the field's perimeter, and the low commercial buildings along the side of the runway obscured the view. I shuffled my papers into my briefcase as we taxied to the reception building. I'd spent the three-hour flight over the Atlantic re-reading all the principal reports and interviews, refreshing my memory of the case. For some reason the knowledge lessened any feeling of comfort. The memories were all too clear now: the cold night, the blood-soaked body. Francis was missing from the investigation now, dead these last five years. It was he, I freely admit, who had given me a degree of comfort in tackling the question of who had killed poor Justin Ascham Raleigh. Always the old missi dominici had exuded the air of conviction, the epitome of an irresistible force. It would be his calm persistence that would unmask the murderer, I'd always known and accepted that. Now the task was mine alone.

I emerged from the plane's walkway into the reception lounge. Neill Heller Caesar was waiting to greet me. His physical appearance had changed little, as I suppose had mine. Only our styles were different; the fifties had taken on the air of a colorful radical period that I wasn't altogether happy with.

Neill Heller Caesar wore a white suit with flares that covered his shoes. His purple and green cheesecloth shirt had rounded collars a good five inches long. And his thick hair was waved, coming down below his shoulders. Tiny gold-rimmed amber sunglasses were perched on his nose.

He recognized me immediately, and shook my hand. "Welcome to Manhattan," he said.

"Thank you. I wish it was under different circumstances."

He prodded the sunglasses back up his nose. "For you, of course. For myself, I'm quite glad you're here. You've put one of my charges in the clear."

"Yes. And thank you for the cooperation."

"A pleasure."

We rode a limousine over one of the bridges into the city itself. I complimented him on the height of the buildings we were approaching. Manhattan was, after all, a Caesar city.

"Inevitable," he said. "The population in America's northern continent is approaching one and a half billion-and that's just the official figure. The only direction left is up."

We both instinctively looked at the limousine's sunroof. "Speaking of which: how much longer?" I asked.

He checked his watch. "They begin their descent phase in another five hours."

The limousine pulled up outside the skyscraper which housed the Caesar family legal bureau in Manhattan. Neill Heller Caesar and I rode the lift up to the seventy-first floor. His office was on the corner of the building, its window walls giving an unparalleled view over ocean and city alike. He sat behind his desk, a marble-topped affair of a stature equal to the room as a whole, watching me as I gazed out at the panorama.

"All right," I said. "You win. I'm impressed." The sun was setting, and in reply the city lights were coming on, blazing forth from every structure.

He laughed softly. "Me too, and I've been here fifteen years now. You know they're not even building skyscrapers under a hundred floors any more. Another couple of decades and the only time you'll see the sun from the street will be a minute either side of noon."

"Europe is going the same way. Our demographics are still top weighted, so the population rise is slower. But not by much. Something is going to have to give eventually. The Church will either have to endorse contraception, or the pressure will squeeze us into abandoning our current restrictions." I shuddered.

"Can you imagine what a runaway expansion and exploitation society

would be like?"

"Unpleasant," he said flatly. "But you'll never get the Borgias out of the Vatican ."

"So they say."

Neill Heller Caesar's phone rang. He picked it up and listened for a moment. "Antony is on his way up."

"Great."

He pressed a button on his desk, and a large wall panel slid to one side. It revealed the largest TV screen I'd ever seen. "If you don't mind, I'd like to keep the Prometheus broadcast on," he said. "We'll mute the sound."

"Please do. Is that thing color?" Our family channel had only just begun to broadcast in the new format. I hadn't yet availed myself with a compatible receiver.

His smile was the same as any boy given a new football to play with. "Certainly is. Twenty-eight-inch diameter, too-in case you're wondering."

The screen lit up with a slightly fuzzy picture. It showed an external camera view, pointing along the fuselage of the Prometheus, where the silver gray moon hung over it. Even though it was eight years since the first manned spaceflight, I found it hard to believe how much progress the Joint Families Astronautics Agency had made. Less than five hours now, and a man would set foot on the moon!

The office door opened and Antony Caesar Pitt walked in. He had done well for himself over the intervening years, rising steadily up through his family's legal offices. Physically, he'd put on a few pounds, but it hardly showed. The biggest change was a curtain of hair, currently held back in a ponytail.

There was a mild frown on his face to illustrate his disapproval at being summoned without explanation. As soon as he saw me the expression changed to puzzlement, then enlightenment.

"I remember you," he said. "You were one of the Raleigh representatives assigned to Justin's murder. Edward, isn't it?"

"That's helpful," I said.

"In what way?"

"You have a good memory. I need that right now."

He gave Neill Heller Caesar a quick glance. "I don't believe this. You're here to ask me questions about Justin again, aren't you?"

"Yes."

"For Mary's sake! It's been twenty-one years."

"Yes, twenty-one years, and he's still just as dead."

"I appreciate that. I'd like to see someone brought to justice as much as you. But the Oxford police found nothing. Nothing! No motive, no enemy. They spent weeks trawling through every tiny little aspect of his life. And with you applying pressure they were thorough, believe me. I should know, with our gambling debt I was the prime suspect."

"Then you should be happy to hear, you're not any more. Something's changed."

He flopped down into a chair and stared at me. "What could possibly have changed?"

"It's a new forensic technique." I waved a hand at the television set. "Aeroengineering isn't the only scientific discipline to have made progress recently, you know. The families have developed something we're calling genetic fingerprinting. Any cell with your DNA in it can now be positively identified."

"Well good and fabulous. But what the hell has it got to do with me?"

"It means I personally am now convinced you were at the Westhay that night. You couldn't have murdered Justin."

"The Westhay." He murmured the name with an almost sorrowful respect. "I never went back. Not after that. I've never played cards since, never placed a bet. Hell of a way to get cured." He cocked his head to one side, looking up at me. "So what convinced you?"

"I was there at the club the following morning. I found a cigar butt in the rubbish. Last month we ran a genetic fingerprint test on the saliva residue, and cross referenced it with your blood sample. It was yours. You were there that night."

"Holy Mary! You kept a cigar butt for twenty-one years?"

"Of course. And the blood, as well. It's all stored in a cryogenic vault now along with all the other forensic samples from Justin's room. Who knows what new tests we'll develop in the future."

Antony started laughing. There was a nervous edge to it. "I'm in the clear. Shit. So how does this help you? I mean, I'm flattered that you've come all this way to tell me in person, but it doesn't change anything."

"On the contrary. Two very important factors have changed thanks to this. The number of suspects is smaller, and I can now trust what you tell me. Neill here has very kindly agreed that I can interview you again. With your permission, of course."

This time the look Antony flashed at the family representative was pure desperation. "But I don't have anything new to tell you. Everything I knew I told the police. Those interviews went on for days."

"I know. I spent most of last week reading through the transcripts again."

"Then you know there's nothing I can add."

"Our most fundamental problem is that we never managed to establish a motive. I believe it must originate from his personal or professional life. The murder was too proficient to have been the result of chance. You can give me the kind of access I need to Justin's life to go back and examine possible motives."

"I've given you access, all of it."

"Maybe. But everything you say now has more weight attached. I'd like you to help."

"Well sure. That's if you're certain you can trust me now. Do you want to wire me up to a polygraph as well?"

I gave Neill Heller Caesar a quick glance. "That won't be necessary."

Antony caught it. "Oh great. Just bloody wonderful. OK. Fine. Ask me what the hell you want. And for the record, I've always answered honestly."

"Thank you. I'd like to start with the personal aspect. Now, I know you were asked a hundred times if you'd seen or heard anything out of the

ordinary. Possibly some way he acted out of character, right?"

"Yes. Of course. There was nothing."

"I'm sure. But what about afterwards, when the interviews were finished, when the pressure had ended. You must have kept on thinking, reviewing all those late night conversations you had over cards and a glass of wine. There must have been something he said, some trivial non sequitur, something you didn't bother going back to the police with."

Antony sank down deeper into his chair, resting a hand over his brow as weariness claimed him. "Nothing," he whispered. "There was nothing he ever said or did that was out of the ordinary. We talked about everything men talk about together, drinking, partying, girls, sex, sport; we told each other what we wanted to do when we left Oxford, all the opportunities our careers opened up for us. Justin was a template for every family student there. He was almost a stereotype, for Mary's sake. He knew what he wanted; his field was just taking off, I mean ..." He waved at the TV screen. "Can you get anything more front line? He was going to settle down with Bethany, have ten kids, and gaze at the stars for the rest of his life. We used to joke that by the time he had his three hundredth birthday he'd probably be able to visit them, all those points of light he stared at through a telescope. There was nothing unusual about him. You're wasting your time with this, I wish you weren't, I really do. But it's too long ago now, even for us."

"Can't blame me for trying," I said with a smile. "We're not Shorts, for us time is always relevant, events never diminish no matter how far away you move from them."

"I'm not arguing," he said weakly.

"So what about his professional life? His astronomy?"

"He wasn't a professional, he was still a student. Every week there was something that would excite him; then he'd get disappointed, then happy again, then disappointed ... That's why he loved it."

"We know that Justin had some kind of project or theory which he was working on. Nobody seemed to know what it was. It was too early to take it to his professor, and we couldn't find any notes relating to it. All we know is that it involved some kind of spectrography. Did he ever let slip a hint of it to you?"

"His latest one?" Antony closed his eyes to assist his recall. "Very little. I think he mentioned once he wanted to review pictures of supernovae. What for, I haven't got the faintest idea. I don't even know for certain if that was the new idea. It could have been research for anything."

"Could be," I agreed. "But it was a piece of information I wasn't aware of before. So we've accomplished something today."

"You call that an accomplishment?"

"Yes. I do."

"I'd love to know what you call building the Channel Tunnel."

My smile was pained. Our family was the major partner in that particular venture. I'd even been involved in the preliminary negotiations. "A nightmare. But we'll get there in the end."

"Just like Justin's murder?"

"Yes."

THREE

Ganymede ID 1920

My journey out to Jupiter was an astonishing experience. I'd been in space before, of course, visiting various low Earth orbit stations which are operated by the family, and twice to our moonbase. But even by current standards, a voyage to a gas giant was considered special.

I took a scramjet-powered spaceplane from Gibraltar spaceport up to Vespasian in its six-hundred-mile orbit. There wasn't much of the original asteroid left now, just a ball of metal-rich rock barely half a mile across. Several mineral refineries were attached to it limpet-fashion, their fusion reactor cooling fins resembling black peacock tails. In another couple of years it would be completely mined out, and the refineries would be maneuvered to the new asteroids being eased into Earth orbit.

A flotilla of industrial and dormitory complexes drifted around Vespasian, each of them sprouting a dozen or more assembly platforms. Every family on Earth was busy constructing more micro-gravity industrial systems and long-range spacecraft. In addition to the twenty-seven moonbases, there were eight cities on Mars and five asteroid colonies; each venture bringing some unique benefit from the purely scientific to considerable financial and economic reward. Everyone was looking to expand their activities to some fresh part of the solar system, especially in the wake of the Caesar settlement claim.

Some of us, of course, were intent on going further still. I saw the clearest evidence of that as the Kuranda spiraled up away from Earth. We passed within eight thousand miles of what the planetbound are calling the Wanderers Cluster. Five asteroids in a fifty-thousand-mile orbit, slowly being hollowed out and fitted with habitation chambers. From Earth they appeared simply as bright stars performing a strange slow traverse of the sky. From the Kuranda (with the aid of an on-board video sensor) I could clearly see the huge construction zones on their surface where the fusion engines were being fabricated. If all went well, they would take two hundred years to reach Proxima Centuri. Half a lifetime cooped up inside artificial caves, but millions of people had applied to venture with them. I remained undecided if that was a reflection of healthy human dynamism, or a more subtle comment on the state of our society.

Progress, if measured by the yardstick of mechanization, medicine, and electronics, seemed to be accelerating at a rate which even I found perturbing.

Too many people were being made redundant as new innovations came along, or AIs supplanted them. In the past that never bothered us-after all who wants to spend four hundred years doing the same thing. But back then it was a slow transition, sliding from occupation to occupation as fancy took you. Now such migrations were becoming forced, and the timescale shorter. There were times I even wondered if my own job was becoming irrelevant.

The Kuranda took three months to get me to Jupiter, powered by low-temperature ion plasma engines, producing a small but steady thrust the whole way. It was one of the first of its class, a long-duration research and explorer ship designed to take our family scientists out as far as Neptune-Two hundred yards long, including the propellant tanks and fusion reactors.

We raced round Jupiter's pale orange cloudscape, shedding delta-V as captain Harrison Dominy Raleigh aligned us on a course for Ganymede. Eight hours later when we were coasting up away from the gas giant, I was asked up to the bridge. Up is a relative term on a spaceship which wasn't accelerating, and the bridge is at the center of the life-support section. There wasn't a lot of instrumentation available to the three duty officers, just some fairly sophisticated consoles with holographic windows and an impressive array of switches. The AI actually ran Kuranda, while people simply monitored its performance and that of the primary systems.

Our captain, Harrison Dominy Raleigh, was floating in front of the main sensor console, his right foot Velcroed to the decking.

"Do we have a problem?" I asked.

"Not with the ship," he said. "This is strictly your area."

"Oh?" I anchored myself next to him, trying to comprehend the display graphics. It wasn't easy, but then I don't function very well in low gravity situations.

Fluids of every kind migrate to my head, which in my case brings on the most awful headaches. My stomach is definitely not designed to digest floating globules of food. And you really would think that after seventy-five years of people traveling through space that someone would manage to design a decent freefall toilet. On the plus side, I'm

not too nauseous during the aerial maneuvers that replace locomotion, and I am receptive to the anti-wasting drugs developed to counter calcium loss in human bones. It's a balance which I can readily accept as worthwhile in order to see Jupiter with my own eyes.

The captain pointed to a number of glowing purple spheres in the display, each one tagged by numerical icons. "The Caesars have orbited over twenty sensor satellites around Ganymede. They provide a full radar coverage out to eighty thousand miles. We're also picking up similar emissions from the other major moons here. No doubt their passive scans extend a great deal further."

"I see. The relevance being?"

"Nobody arrives at any of the moons they've claimed without them knowing about it. I'd say they're being very serious about their settlement rights."

"We never made our voyage a secret. They have our arrival time down to the same decimal place as our own AI."

"Which means the next move is ours. We arrive at Ganymede injection in another twelve hours."

I looked at those purple points again. We were the first non-Caesar spaceship to make the Jupiter trip. The Caesars sent a major mission of eight ships thirteen years ago; which the whole world watched with admiration right up until commander Ricardo Savill Caesar set his foot on Ganymede and announced to his massive television audience that he was claiming not only Ganymede, but Jupiter and all of its satellites for the Caesar family. It was extraordinary, not to say a complete violation of our entire world's rationalist ethos. The legal maneuvering had been going on ever since, as well as negotiations amongst the most senior level of family representatives in an attempt to get the Caesars to repudiate the claim. It was a standing joke for satirical show comedians, who got a laugh every time about excessive greed and routines about one person one moon. But in all that time, the Caesars had never moved from their position that Jupiter and its natural satellites now belonged to them. What they had never explained in those thirteen years is why they wanted it.

And now here we were. My brief wasn't to challenge or antagonize them, but to establish some precedents. "I want you to open a communication link to their primary settlement," I told the captain. "Use standard orbital flight control protocols, and inform them of our

intended injection point. Then ask them if there is any problem with that. Treat it as an absolutely normal everyday occurrence ... we're just one more spaceship arriving in orbit. If they ask what we're doing here: we're a scientific mission and I would like to discuss a schedule of geophysical investigation with their Mayor. In person."

Harrison Dominy Raleigh gave me an uncomfortable grimace. "You're sure you wouldn't like to talk to them now?"

"Definitely not. Achieving a successful Ganymede orbit is not something important enough to warrant attention from a family representative."

"Right then." He flipped his headset mike down, and instructed the AI on establishing a communication link.

It wasn't difficult. The Caesars were obviously treading as carefully as we were. Once the Kuranda was in orbit, the captain requested spaceport clearance for our ground to orbit shuttle, which was granted without comment.

The ride down was an uneventful ninety minutes, if you were to discount the view from the small, heavily-shielded ports. Jupiter at a quarter crescent hung in the sky above Ganymede. We sank down to a surface of fawn-colored ice pocked by white impact craters and great sulci, clusters of long grooves slicing through the grubby crust, creating broad river-like groupings of corrugations.

For some reason I thought the landscape more quiet and dignified than that of Earth's moon. I suppose the icescape's palette of dim pastel colors helped create the impression, but there was definitely an ancient solemnity to this small world.

New Milan was a couple of degrees north of the equator, in an area of flat ice pitted with small newish craters. An undisciplined sprawl of emerald and white lights covering nearly five square miles. In thirteen years the Caesars had built themselves quite a substantial community here. All the buildings were freestanding igloos whose base and lower sections were constructed from some pale yellow silicate concrete, while the top third was a transparent dome. As the shuttle descended toward the landing field I began to realize why the lights I could see were predominately green. The smallest igloo was fifty yards in diameter, with the larger ones reaching over two hundred yards; they all had gardens at their center illuminated by powerful lights underneath the glass.

After we landed, a bus drove me over to the administration center in one of the large igloos. It was the Mayor, Ricardo Savill Caesar himself, who greeted me as I emerged from the airlock. He was a tall man, with the slightly flaccid flesh of all people who had been in a low-gravity environment for any length of time. He wore a simple gray and turquoise one-piece tunic with a mauve jacket, standard science mission staff uniform. But on him it had become a badge of office, bestowing that extra degree of authority. I could so easily imagine him as the direct descendant of some First Era Centurion commander.

"Welcome," he said warmly. "And congratulations on your flight. From what we've heard, the Kuranda is an impressive ship."

"Thank you," I said. "I'd be happy to take you round her later."

"And I'll enjoy accepting that invitation. But first it's my turn. I can't wait to show off what we've done here."

Thus my tour began; I believe there was no part of that igloo into which I didn't venture at some time during the next two hours. From the life support machinery in the lower levels to precarious walkways strung along the carbon reinforcement strands of the transparent dome. I saw it all. Quite deliberately, of course. Ricardo Savill Caesar was proving they had no secrets, no sinister apparatus under construction. The family had built themselves a self-sustaining colony, capable of expanding to meet the growing population. Nothing more. What I was never shown nor told, was the reason why.

After waiting as long as politeness required before claiming I had seen enough we wound up in Ricardo Savill Caesar's office. It was on the upper story of the habitation section, over forty feet above the central arboretum's lawn, yet the tops of the trees were already level with his window. I could recognize several varieties of pine and willow, but the low gravity had distorted their runaway growth, giving them peculiar swollen trunks and fat leaves.

Once I was sitting comfortably on his couch he offered me some coffee from a delicate china pot.

"I have the beans flown up and grind them myself," he said. "They're from the family's estates in the Caribbean . Protein synthesis might have solved our food supply problems, but there are some textures and tastes which elude the formulators."

I took a sip, and pursed my lips in appreciation. "That's good. Very

good."

"I'm glad. You're someone I think I'd like to have on my side."

"Oh?"

He sat back and grinned at me. "The other families are unhappy to say the least about our settlement claim on this system. And you are the person they send to test the waters. That's quite a responsibility for any representative. I would have loved to sit in on your briefing sessions and hear what was said about us terrible Caesars."

"Your head would start spinning after the first five hours," I told him, dryly. "Mine certainly did."

"So what is it you'd like your redoubtable ship and crew to do while they're here?"

"It is a genuine scientific mission," I told him. "We'd like to study the bacterial life you've located in the moons here. Politics of settlement aside, it is tremendously important, especially after Mars turned out to be so barren."

"I certainly have no objection to that. Are we going to be shown the data?"

"Of course." I managed to sound suitably shocked. "Actually, I was going to propose several joint expeditions. We did bring three long-duration science station vehicles with us that can be deployed on any of the lunar surfaces."

Ricardo Savill Caesar tented his forefingers, and rested his chin on the point. "What kind of duration do these vehicles have?"

"A couple of weeks without resupply. Basically they're just large caravans we link up to a tractor unit. They're fully mobile."

"And you envisage dispatching a mission to each moon?"

"Yes. We're also going to drop a number of probes into Jupiter to investigate its structural composition."

"Interesting. How far down do you believe they can reach?"

"We want to examine the supercritical fluid level, the surface of it at least."

He raised an eyebrow. "I shall be most impressed if your probe design is good enough to reach that level. The furthest we've ever reached is seven hundred kilometers down."

"Our engineers seem quite confident it can be reached. The family has always given solid-state science a high priority."

"A kind of mechnological machismo."

"I suppose so."

"Well, this is all very exciting. I'm very keen to offer you our fullest cooperation and assistance. My science team has been looking forward to your arrival for months. I don't think they'll be disappointed. Fresh angles are always so rewarding, I find."

I showed him a satisfied nod. This stalemate was the outcome with the highest probability according to our council strategists. We'd established that our family was free to roam where it chose on any of the moons, but not to stay. Which meant the most popular, if somewhat whimsical theory, was unlikely.

Several senior family councils had advanced the notion that the Caesars had discovered high-order life out here, and wanted to keep it for themselves. After all, since they found bacteria in the undersurface seas of both Ganymede and Europa, then more complex life was an ultra-remote possibility. Personally, I had always considered that just too far fetched. More curiously, Ricardo Savill Caesar hadn't objected to us probing Jupiter itself. The second most likely theory was that they'd found something of extraordinary value in its atmosphere. Again unlikely. There had been dozens of robot probes sent here in the decades before their flight. Which put me far enough down the list to start considering alien spaceships and survivors of Atlantis. Not an enjoyable prospect for any rational man. But as Ricardo Savill Caesar wasn't giving anything away, my options were reducing. It was an annoying challenge. He knew that I knew the reason for the settlement claim had to be staring right at me. I simply couldn't see it.

I told myself it didn't matter. I never expected to catch it straight away, and we were due to stay at Jupiter for six months. There was plenty of time.

"Then we're all done bar the details," I said. "I'll get my AI to link to your AI. I'm sure they can organize schedules and personnel rosters between them."

He raised his cup in happy salute. "I'm sure they can. I'll authorize a link to the Kuranda immediately."

"There is one other thing. A small matter."

"Oh?"

"I'd like to see someone while I'm here. One of your deputies, in fact. It relates to an old investigation of mine. There are one or two points I need to clear up with her."

"Who are we talking about?"

"Bethany Maria Caesar. I gather she's on Io."

"Yes," he said cautiously. "She runs the science team there."

His abrupt shift in attitude was fascinating. It was as though I'd suddenly won a point in our game of words and nuances. If only I could have worked out how I'd done that. All I'd said was her name. "You don't object to me talking to her, do you?"

"Not at all. If it isn't confidential, what is this old investigation, exactly?"

"A murder."

"Good Lady Mary. Really?"

"As I say, it's an old one. However, I have a new theory I'd like to run past her."

The Io science outpost was nothing like New Milan. It consisted of two dozen cylindrical compartments resting on concrete cradles sunk deep into the carmine-colored crust; they were all plugged into each other like some array of antique electronic components. For years they'd suffered from the exhalations of the volcano. Its furious sulfur emission clouds had gently drizzled down, staining their metallic-white casings with a thin film of dirty amber colloid which dribbled round the exterior to drip from the belly. But for all its functionalism, the Caesars had certainly chosen a location with a view. One of the compartments had an observation gallery, aligned so that its curving windows looked directly out at the distant sulfur volcano, which appeared as a dark conical silhouette rising out of the horizon.

I waited for Bethany Maria Caesar at one of the refractory tables in

the gallery, staring straight out at the volcano through the gritty, smeared windows, hoping I would get to see an eruption. The only evidence of any seismic activity was the occasional tremor which ran through the compartment, barely enough to create a ripple in my teacup.

"Hello, Edward, it's been a long time."

I would never have recognized her. This woman standing before me bore only the faintest resemblance to that beautiful, distraught girl I'd sat with through innumerable interviews eight decades ago. She looked, for want of a better word, old. Her face was lined with chubby wrinkles that obscured the features I once knew; nor was there any more of that glowing blonde hair-she'd had a crew cut so severe it barely qualified as stubble, and that was grayish. The tunic she wore was loose-fitting, but even that couldn't disguise her stooped posture.

She put both hands on the table and lowered herself into a chair opposite me with a slight wheeze. "Quite a sight, aren't I?"

"What happened?" I asked, appalled. No briefing file had mentioned any sort of accident or chronic illness.

"Low gravity happened, Edward. I can see your face is all puffed up with fluid retention, so you already know a fraction of the suffering possible. Content yourself with that fraction. Low gravity affects some people worse than others, a lot worse. And after thirteen years' constant exposure, I'm just about off the scale."

"Dear Mary! I don't know what you Caesars want with Jupiter, but nothing is worth abusing yourself like this. Come home, back to Earth."

Her smile alluded to a wisdom denied me. "This is my home. Jupiter is the frontier of humanity."

"How can you say that? It's killing you."

"Life!" the word was spat out. "Such a treacherous gift."

"A precious gift," I countered.

"Ah yes. Poor old Justin. I was quite surprised when I saw you were the representative the Raleighs were sending. You caused me quite a little trip down memory lane."

"I won't lie to you, you're not my primary reason for being here."

"Ha. The great mystery of our time. What can those wicked Caesars want with Jupiter? Had any luck working it out yet?"

"None at all. But we'll get there in the end."

"I'm sure you will. Devote enough processing power to any problem, and ultimately it will be solved."

"That's more like the Bethany I remember."

"I doubt it. This is experience talking. We have more AIs per head of population up here than anywhere on Earth. Every scrap of research data is analyzed and tabulated-our knowledge base is expanding at a rate we can barely keep track of. And we can devote so much of ourselves to understanding it. We don't have to worry so much about our physical requirements. The AIs take care of that for us; they run the food synthesis plants, the cybernetics factories, administration. I consider my life here to be my liberation, Edward. I don't have to concern myself with the mundane anymore. I can use my mind full time."

"Then I'm glad for you. You've found something new out here. AI utilization on Earth is causing no end of problems. They can take over the running of just about all mechanical operations and do it with increased efficiency. Industry and utility provision are discarding more and more human operatives. We're seeing large-scale patterns of unemployment evolving. And it brings a host of social unrest with it. There's more petty crime than there ever used to be; psychologists need counseling they have such a heavy work load these days. People are starting to question the true worth of introducing AIs."

"I'm sure there will be temporary problems thrown up by AI integration. You never get smooth transitions of this magnitude. Moving to a leisure-based society is going to be hard for a people who are so set in their ways. The penalty for a long life is the increasing resistance to change. The familiar is too easy and comfortable for it to be discarded quickly. And the families are very familiar with their life as it is. But the change will happen. If we have a purpose it is to think and create; that's our uniqueness. Any non-sentient animal can build a nest and gather food. Now this march through progress has finally started to relieve us of that physical distraction. I mean, that's what we were doing it for in the first place, right? Once you set out to determine how the universe works, then as a species there's no turning

back. We're freefalling to the plateau, Edward."

"The plateau?"

"The moment at which science has explained everything, and machines are perfect. After that, human life becomes one long summer afternoon picnic. All we do then is think, dream, and play."

"I can't quite see that myself."

"That's a shame. You must adapt or die, Edward. I took you as someone bright enough to surmount that last hurdle and climb up there to the plateau. Perhaps the Sport of Emperors wasn't the blessing we like to believe, at least, not for everyone. The original Caesars were so certain they were doing the right thing with their gift for all the Empire. They'd bred stables of gladiators for generations, evolving their speed and strength until they were invincible in the arena. Only age slowed and weakened them. It was such a short leap to breed for longevity, and what a political weapon that was. The one thing everybody always wants. But the life they bred for in the children of the Empire was longer than nature ever intended. And messing with nature however crudely is always dangerous. Humans change their environment. That is our true nature. The cycle of life and death, of constant renewal, is nature's way of adapting us as a species to the freshness we create for ourselves."

"Are you saying I've outlived my usefulness?"

"I don't know, Edward. Can you give up everything you've lived for in order to face the unknown? Or are you going to watch trees grow as the same old seasons wash past you to no effect?"

"That's what you believe you're doing by living out here, is it?"

"I enjoy change. It's the most magnificent challenge."

"You have the luxury of enjoying it."

Her laugh was a fluid-clogged cackle. "Oh Edward, so single minded. You and I are alive, which is more than can be said for Justin. I have to admit, I'm very curious. What can you possibly have to add to the matter at this stage?"

I waved a hand at the curving windows, with their slim reinforcement mesh of carbon strands. That particular carbon allotrope was the reason the glass could be so thin, one of the new miracles we took so

much for granted. "Carbon 60."

"How the hell can pentospheres possibly be connected to Justin's murder? We only discovered the stuff ten years ago. Oh. Mary, yes! It was Alexander, wasn't it? He was the one who found it."

"I hope so."

"Hope?"

"Carbon 60 is an awesome substance. There are so many theoretical applications, from ultrastrength fibers to superconductivity. It's being incorporated into just about every process and structure we use. And they're still finding new uses on a daily basis."

"So?"

"So I need to know about Justin's great project, the one he was working on when he was killed. Was he studying supernovae for carbon signatures?"

"Heavens." She sat back and gave me an admiring look. "You really don't give up, do you?"

"No."

"We only found out that carbon 60 existed in stellar nebulae after we—or rather Alexander—produced it in a laboratory. What you're saying is that it could have happened the other way round, aren't you? That some astronomer found traces, proof that it physically existed, and chemists worked at synthesizing it afterwards."

"It's certainly possible. The existence of carbon 60 has been postulated for a long time; I traced an early reference back to 1815—it was some very speculative paper on theoretical molecular structures. Justin might have had the idea carbon could be produced by stellar events, and found the spectral signature."

"And Alexander, who was a chemist, immediately realized the practical use such a find would have, and killed him for it. Then when a decent interval had passed, in this case, ninety years, he miraculously produces the elusive substance in his lab, to the enormous benefit of his family who have lauded him ever since. Who would possibly suspect any connection with a tragic murder all that time ago? And..." She gave a start. "Alexander never had an air tight alibi for that night, plus he was working on carbon at the time. Yes, I

can see why you've invested so much effort into this."

"I've never been able to find out what Justin was working on," I said. "Even you said you weren't sure. But considering the state you were in after his murder, you weren't even sure what day it was. And you've had a long time to reflect on everything he ever said to you."

"I'm sorry, Edward, you've had a wasted trip."

"You don't know?" I couldn't keep the bitterness from my voice. It had been a desperately long shot. But it was the first possible lead I'd got in sixty-seven years.

"I know exactly what Justin was working on," she said sorrowfully. "I just didn't want to tell anyone at the time."

"Why?" I demanded, suddenly furious. "Information like that was critical to the investigation."

"No it wasn't. Don't you understand anything? I loved him, I really did. And he had a crazy theory. He thought there might be life in space. Bacteria that floated through the void like interstellar dust clouds, propelled by solar wind. That's the spectral signature he was looking for, not carbon 60. He said it was possible all our plagues came from outer space-that was why our immune system always takes time to respond, because each one was new to our planet.

He believed all that back in the 1830s. Holy Mary, what a brilliant mind."

"But-"

"Yes I know," she snapped at me. "He was right, damnit. He was absolutely right. And I was on the mission which proved it beyond any doubt. We're convinced the bacterial life we found on Ganymede and Europa originated from space-there's evidence for it all over the Jovian system. Do you have any idea how painful that was for me after so many years? It's not an irony, it's a tragedy. And I can't tell anybody he thought of it first, because there's no proof. He'll never get the credit he deserves, and that's my fault."

"So why didn't you tell us at the time?" I asked.

"To protect his memory. I didn't want people laughing at my beautiful lover. He was too precious to me for that. I wouldn't have been able to stand it. And they would have done it, the newspapers would have

ridiculed him, because it was all too fantastic back then. Invasion of the space flu! I wanted to give him some dignity. He deserved that much."

I sighed in defeat. She was right, I'd put a lot of hope on her confirming my theory. "I don't suppose I can blame you for protecting him. In fact, I'd probably do the same thing."

She rested her hand on mine as another little tremor ran through the gallery. "What will you do now?"

"Me? Complete the Kuranda mission, then go home and get on with my life. My changeable life, that is."

Her heavy, wrinkled cheeks lifted in a melancholy smile. "Thank you, Edward. It's nice to know that someone else cared about him."

FOUR

Raleigh Family Institute 1911

The lone oak tree was over two hundred years old, its upper half broken long ago, leaving just an imposing stump to support several sturdy boughs. Rich emerald moss was creeping into the wrinkly bark around the base. I settled down in the cusp of a forking root and looked back down the sloping grassland toward the lake. My FAI shrank to a discrete soap bubble beside my head, emission functions on standby, isolating me from the digital babble of family business. It left my own thoughts free to circulate quietly in my head. It was a lovely day, the sun rising above the valley walls, already warm enough to burn off the dew. Buttercups and daisies starred the thick grass, their tiny petals already fully open, receptive. As always, the vista allowed me considerable serenity.

I made a point of taking a walk around the institute grounds every day, unless the weather was truly awful of course. And it could be on occasion. Climate control was one thing we hadn't got round to implementing. I was glad about that-there should be some unpredictability in our lives. I suppose that's why I enjoyed the grounds so much. They were wholly natural. Since I was appointed to the senior family council eight years ago, I'd made damn sure that the only trees planted in the institute valley had been genuine genotypes-same went for the rest of the flora.

A folly, perhaps. But on the rare occasions when anyone questioned me about it, I maintained that it was a valid cultural enclave, and what I was doing was essential preservation. Now that our urban areas were depopulating, everyone wanted to enjoy their own little piece of the rural idyll. Farming had been in a solid decline ever since food synthetics became available at the start of the century. The individual farms which carried on were run by cantankerous old conservationists or simply families who were determinedly clinging to the old ways. There weren't many such anachronisms-they didn't take up much land area, so it didn't affect the joint council's overall habitation development strategy.

As a result, abandoned farmland right across the country was being reinvented as the kind of pastoral woodland that only ever existed in the most romanticized notions of pre-First Era history. Everybody who left the city wanted their own forest, complete with a glade that had a

pool fed by a babbling brook, where their mock First Era villa could be sited. Nobody wanted to wait a hundred years for the trees to grow, so reformatted DNA varieties were the grande fashion, taking just a couple of years to grow sixty or seventy feet, then slowing into a more natural growth model. It struck me as strange, as if our new biononic technology had infected us with different mental patterns; as society matured we were slowly reverting to a Short mentality. Everything had to be now, as if there were no tomorrow other than the awesome potential future which Bethany Maria Caesar established for us in nineteen sixty three.

My FAI expanded, chiming melodically. I still used the old interface mode, despite the ease of modern direct sensory linkages. It was, I suspected, a quiet personal admission that Bethany Maria Caesar had been right those many years ago back on Io when she claimed that resistance to evolution was derived from age. None of my great-great-great-grandchildren had shown any recalcitrance in being fitted with interfaces, nor demonstrated any psychological harm resulting from them. Not that I could hold my own childhood up as any kind of template to the modern world. However, I remained aloof. When you've had to upgrade through as many different types of interfaces and operating programs as I have you remain profoundly skeptical as to how long the latest is going to last before it achieves obsolescence. Best you stay with the one you found most comfortable for a few decades.

It was Rebecca Raleigh Stothard's face that filled the FAI. I might have guessed, there weren't many people my AI would allow to intrude on my private time.

Her holographic image grinned at me, conjuring up a host of most pleasurable memories. Rebecca had undergone DNA reset five years ago, reverting her physiological age to her mid-twenties. She'd been an attractive woman when we had our first dalliance a hundred years ago; now she was simply angelic.

"I thought you'd like to be the first to hear," she said. "The Neuromedical Protocol Commission have cleared the procedure, effective from twelve-thirty p.m. Rome mean time today."

"Yes!" the word hissed out from my lips. Given what turbulent times we were living in, it was wholly unjustified for me to feel so elated at such a small piece of news. Yet that didn't prevent me from laughing out loud. "I've finally brought it to an end."

"The Borgias are still in the Vatican ," she said primly.

"Show a little confidence. It has to be the pair of them."

"I hope so," she said. There was a note of concern to her voice. "I'd hate to think you were becoming obsessional."

"You know as well as I do the percentage of my time which this case occupies is so small it can't even be measured. This is simply the satisfaction of a job seen through to its end. Besides, I owe it to Francis."

"I know. So what's next?"

"I'll start the ball rolling, and haul her in. Is the system on-line here?"

"Give me three days to complete installation." She winked, and her image vanished. The FAI remained on active status.

The light right across the valley suddenly and silently quadrupled in intensity, turning a vivid violet hue. My iris filters closed, and I looked straight up. A brilliant star was burning in the eastern quadrant of the sky, the backwash of energy from a starship initiating its compression drive. Violet drifted into turquoise which in turn began the shade into emerald. I still think the spectral wash from a compression drive is among the most wondrous sights we have ever created, even if it is an accidental by-product. It wouldn't last, of course. The first generation of faster-than-light starships were crude affairs, creating their own individual wormhole down which to fly. The families were cooperating on the project to construct exotic matter, which would be able to hold wormholes open permanently. That had to qualify as one of the more favorable signs of recent years-even at the height of the crazed sixties we managed to retain enough sense to see the necessity of such collaboration. Even the Caesars joined with us.

Every time I thought of the negotiations I was involved in to revamp the old Joint Families Astronautics Agency. I also remembered my trip to Jupiter, and marveled at how we were so incapable of seeing the utterly obvious. Size hid their goal from us. But how could we have possibly known we had to think so big?

Bethany Maria Caesar called her murdered lover a visionary, but compared to her he was blind. As soon as she began her work on biononic systems back in eighteen fifty she had realized what would happen should she eventually be successful. The self-replicating biononics she envisaged would be the pinnacle of molecular

engineering machinery, organelle-sized modules that could assemble single atoms into whatever structure an AI had designed and, equally important, disassemble. Cluster enough of them together like some patch of black lichen, and they would eat their way through any ore, extracting the atoms you required for whatever project you had in mind. They could then weave those atoms into anything from quantum wire and pentospheres to iron girders and bricks. That included food, clothes, houses, starships ... Quite literally, anything you could think of and manage to describe to your AI.

The human race stopped working for a living. Just as she said. Or prophesied, depending on your opinion of her.

The human race had stopped dying, too. Specific medical versions of biononic modules could travel through the human body, repairing damaged cells. They could also reset DNA.

Amongst all the upheaval, it was our view and attitude toward commodities which underwent the most radical of all our revisions. From valuing all sorts of gems and precious metals and rare chemicals, we had switched to valuing just one thing: matter. Any matter.

It became our currency and our obsession. It didn't matter what atom you owned, even if it was only hydrogen-especially hydrogen if you were a Caesar.

Fusion could transform it into a heavier element, one which a biononic module could exploit. Every living person in the solar system had the potential to create whatever they wanted, limited only by personal imagination and the public availability of matter.

And the Caesars had the greatest stockpile of unused matter in the solar system: Jupiter. That's how far ahead they were thinking once Bethany spurred them on. The population pressures we'd been facing were nothing compared with what was about to be unleashed. A race of semi-immortals with the potential to increase their numbers at a near exponential rate simply by using the old-fashioned natural method of reproduction-never mind artificial wombs and cloning techniques.

To think, when I was young, I used to worry that our early petrol engine cars would use up all the oil reserves. Within weeks of Bethany's biononic modules coming online family spaceships charged off across the solar system to lay claim to any and every chunk of matter a telescope had ever detected. The most disgraceful, shameful year of

post Second Era history. A year of madness and greed, when all our rationality seemed to crumble before the forces of avarice.

The Crisis Conference of '65 managed to calm things down a little. Thankfully, every family rejected the Rothchild claim on the sun. And the rest of the solar system was apportioned almost equally. We Raleighs came out of it with Titan as well as a joint claim-with 15 other families on Saturn. But the Caesars still had Jupiter, consolidating their position as the foremost human family. And the FTL starship project was born, the agreement most accredited with easing the tension.

The function of family councils changed to that of resource allocators, enabling us to enforce the original legal framework that underpinned civilization.

Controlling the distribution of raw matter was economics stripped down to its crudest level. But it worked, after a fashion, allowing us to retain order and balance. Given the circumstances, it was a better outcome than I would have predicted.

The last of the compression drive's scarlet light drained away from the sky, taking with it the strange double shadows cast by the oak. I began instructing the FAI to contact a senior representative of the Lockett family.

Christine Jayne Lockett was a stark reminder that I really ought to get myself reset. Men always suffer from the same casual illusion that we simply became more handsome as we matured, and were increasingly desirable as a result. What tosh.

When she walked into my office in the Meridor Manor all I could see was the bitterness leaking from her face. It spoiled her features, a near-permanent scowl highlighting the wrinkles accumulating around her eyes and across her cheeks. Her hair was still long, but not cared for with any great enthusiasm. And the clothes she wore were at least a century out of date; they looked hand made, and badly at that. Paint flecked her hands, lying thick under short, cracked nails.

The small file of personal data which my AI had collected for me told of how she now lived out in the countryside in a naturalist community. They grew their own food, made their own utensils, smoked their hallucinogenics, and generally avoided contact with the rest of their family. No bionics were allowed across the threshold of their compound, although they did have a net interface to call for

medical help if any of their number had an accident.

She stalked over to my desk and thrust her face up against mine. "Oppressive bastard! Who the hell do you think you are? How dare you have me arrested and forced away from my home like this. I've done nothing wrong." It was almost a scream.

The Lockett family representative who was accompanying her gave me a tired grimace. Apparently Christine Jayne Lockett had refused point blank to use an airpod, insisting she traveled by groundcar. It had taken them eight hours to drive to the institute from northern England .

"Oh yes you have."

My voice was so cold she recoiled.

"You and Carter Osborne Kenyon are the only people left on my suspect list," I said. "And now I'm finally going to discover the truth."

"But Carter was with me for the whole evening."

I directed a mirthless smile at her. "Yes."

It took a moment for the implication to sink in. Her mouth widened in astonishment. "Holy Mary, you think we did it together, don't you? You think we killed that poor, poor boy."

"The rest of the alibis all check out. You two provided each other's alibi. It's the only weak link left."

"You utter shit!" She sat down heavily in my visitor's chair, staring at me with malice and disbelief. "So you wait all this time until you're some super duper big shot, and exploit your position to pressure my family into handing me over to you, all so you can erase a blemish on your record." Her gaze switched to her family representative. "Gutless coward!" she snarled at him. "The Locketts aren't this feeble that we have to kiss Raleigh ass when they tell us. You're supposed to protect me from this kind of victimization. I've got strong links to the elder council, you know. Give me a bloody telephone, I'm going to hang you bastards out to dry."

"Your family council agreed to my interviewing you," I said.

"Then I'm taking this to the Roman Congress itself. I have rights! You can't throw me in prison because you've failed to pin this on anyone

else. Why didn't you bring Carter here, eh? I'll bet the Kenyons wouldn't stand for being shoved around by the likes of you."

"Firstly, Carter is on the Aquaries, they're out exploring stars twenty light-years away, and won't be back for another year. Secondly, you're not under arrest, you're here to be interviewed. Thirdly, if what I suspect is true, Carter will be arrested the moment he docks at New Vespasian."

"Interview me? Mary, how dumb is this? I Did Not Murder Justin. Which part of that don't you understand? Because that's all I'm saying."

"It's not that simple any more, not these days."

My FAI floated over to her, and expanded to display a sheet of text. She waved dismissively at it. "I don't use them. What does it say?"

"It's a ruling from the Neuromedical Protocol Commission, clearing a new design of biononic for human application. This particular module takes direct sensory integration a stage further, by stimulating selected synapses to invoke a deep access response."

"We all stopped speaking Latin at the end of the First Era."

"All right, Christine, it's really very simple. We can read your memories. I'm going to send you down to our laboratory, wire you up to a great big machine, and watch exactly what happened that night on a high-resolution, home theater-sized color screen. And there's not a thing you can do to stop me. Any further questions?"

"Bloody hell! Why, Edward? What do you believe was our motive?"

"I have no idea, although this procedure will enable me to trace it through associative location. All I've got left to go on now is opportunity. You and Carter had that."

Her stubborn scowl vanished. She sat there completely blank-faced for a couple of seconds, then gave me a level smile. "If you believe it, then go right ahead."

On a conscious level I kept telling myself she was bluffing, that it was one last brave gesture of defiance. Unfortunately, my subconscious was not so certain.

The family's forensic department had come up in the world over the

last century. No longer skulking in the basement of Hewish Manor, it now occupied half the third floor. Laboratories were crypts of white gloss surfaces, populated by AI pillars with transparent sensor domes on top. Technicians and robots moved around between the units, examining and discussing the results. The clinic room which we had been allocated had a single bed in the middle, with four black boxy cabinets around it.

Rebecca greeted us politely and ushered Christine to the bed. Strictly speaking, Rebecca was a clinical neurologist these days rather than a forensic doctor, but given how new the application was she'd agreed to run the procedure for me.

As with all biononic systems, there's never anything to actually see. Rebecca adjusted a dispenser mechanism against the nape of Christine's neck, and introduced the swarm of modules. The governing AI guided their trajectory through the brain tissue, controlling and regulating the intricate web they wove within her synaptic clefts. It took over an hour to interpret and format the information they were receiving, and map out the activation pathways within her cerebrum.

I watched the primary stages with a growing sense of trepidation. Justin's murder was one of the oldest active legal files the Raleighs had. The weight of so many years was pressing down on this moment, seeking resolution. If we couldn't solve this now, with all our fantastic technological abilities at my disposal, then I had failed him, one of our own.

Rebecca eventually ordered me to sit down. She didn't actually say "be patient" but her look was enough.

An FAI expanded in the air across one end of the clinic room, forming into a translucent sheet flecked with a moire storm of interference. Color specks flowed together. It showed a hazy image of an antiquated restaurant viewed at eye level. On the couch Christine moaned softly, her eyes closed, as the memory replayed itself inside her skull, a window into history.

"We're there," Rebecca said. She issued a stream of instructions to the AI.

That March night in eighteen thirty-two played out in front of me, flickering and jerking like a home movie recorded on an antique strip of film. Christine sat at a table with her friends in the middle of the Orange Grove. Young, beautiful, and full of zest, their smiles and

laughter making me ache for my own youth. They told each other stories and jokes, complained about tutors, gossiped about students and university staff, argued family politics. After the waiter brought their main course they went into a giggling huddle to decide if they should complain about the vegetables. More wine was ordered. They became louder.

It was snowing when they collected their coats and left. Tiny flecks of ice adding to the mush of the pavement. They stood as a group outside the restaurant, saying their goodbyes, Christine kissing everybody. Then with Carter's arm around her shoulder, the pair of them made their way through Oxford 's freezing streets to the block where she had her artist's garret.

There was the baby-sitter to pay and show out. Then the two of them were alone. They stumbled into her studio, and kissed for a long time, surrounded by Christine's outre paintings. There wasn't much to see of that time, just smears of Carter's face in badly blurred close up. Then she went over to an old chest of drawers, and pulled a stash of cocaine out from a jewelry box. Carter was already undressing when she turned back to him.

They snorted the drugs, and fondled and groped at each other in an ineffectual manner for what seemed an age. The phone's whistling put an end to it. Christine staggered over to answer it, then handed it to Carter. She watched with a bleary focus as his face showed first annoyance then puzzlement and finally shock.

He slammed the handset down and scooped up his clothes. A clock on the studio wall said twenty-six minutes to twelve.

I couldn't move from the clinic seat. I sat there with my head in my hands, not believing what I'd just seen. It had to be faked. The Locketts had developed false memory implantation techniques. They'd corrupted our institute AIs. Christine had repeated the alibi to herself for so long it had become stronger than reality. Aliens traveled back in time to alter the past.

"Edward."

When I looked up, Christine Jayne Lockett was staring down at me. There was no anger in her expression. If anything, she was pitying me.

"I wasn't joking when I said I knew people on our elder council," she said. "And let me tell you, you arrogant bastard, if this ... this mental rape had been in connection with any other case, I would have kicked

up such a stink that your whole family would disown you. The only reason I won't is because I loved Justin. He was my friend, and I'll never forget him for bringing a thread of happiness into my life. I wanted his murderer caught back then, and I want it just as bad now."

"Thank you," I whispered feebly.

"Are you going to give up?"

My smile was one of total self pity. "We're reaching what Bethany called the plateau, the end of scientific progress. I've used every method we know of to find the murderer. Every one of them has failed me. The only thing left now that could solve it is time travel, and I'm afraid our physicists are all pretty much agreed that's just a fantasy."

"Time travel," she said contemptuously. "You just can't see beyond your fabulous technology, can you? Your reliance is sickening. And what use is it when it comes down to the things that are genuinely important?"

"Nobody starves, nobody dies," I snapped at her, abruptly infuriated with her poverty-makes-me-morally- superior attitude. "I notice your happy stone-age colony isn't averse to using our medical resources any time something nasty happens."

"Yes, we fall back on technological medicine. We're neither ignorant, nor stupid. We believe technology as sophisticated as ours should be used as a safety net for our lives, not as an integral part, or ruler, as you choose. The simple way we live allows us to return to nature without having to endure the struggle and squalor of the actual stone age. For all things there is a balance, and you have got it badly wrong. Your society is exploiting the universe, not living in harmony with it. The way we live allows our minds to prosper, not our greed."

"While the way we live allows dreams to become reality. We are a race without limits."

"Without physical limits. What use is that, Edward? What is the ultimate reason to give everyone the power of a god? Look at you, what you're doing-you hoard entire planets in readiness for the day when you can dismantle them and fabricate something in their place. What? What can possibly need building on such a scale? Explore the universe by all means, I'm sure there are miracles and marvels out there just as great as the one we've created for ourselves. But at the end of the day, you should come home to your family and your friends. That's what's truly important."

"I'm glad you've found a way to live with what we've achieved. But you're in a minority. The rest of us want to grab the opportunity this time has gifted us with."

"You'll learn," she said. "After all, you've got eternity."

FIVE

Earth Orbit GO 2000

My flyer ripped up through the ionosphere like a fish leaving water. The gravatonic and magnetic flux lines which knotted around the little craft tugged a braided haze of auroral streamers out behind us, looking for all the world like some ancient chemical rocket exhaust. Once clear of the atmosphere's bulk, I increased the acceleration to twenty gees, and the slender scintillating strand was stretched to breaking point. Wispy photonic serpents writhed back down toward the planet as we burst free.

I extended my perceptual range, tracking the multitude of flyers falling in and out of the atmosphere all around me. They blossomed like silver comets across my consciousness, dense currents of them arching up from the Earth in a series of flowing hoops with every apex reaching precisely six hundred miles above the equator. The portal Necklace itself, which occupied that orbit, was visualized by nodes of cool jade light sitting atop the hoops. Each of them was nested at the center of a subtle spatial distortion, lensing the light outward in curving ephemeral petals.

The flyer soared round in a flat curve, merging with the traffic stream that was heading for the Tangsham portal a thousand miles ahead of me. Africa 's eastern coastline drifted past below, its visual clarity taking on a dreamlike quality, perfectly resolved yet impossibly distant. I watched it dwindle behind the flyer as all the wretched old emotions rose to haunt me again. Although I'd never quite had the courage to deactivate the Justin Ascham Raleigh file in the wake of the debacle which was Christine's memory retrieval, I'd certainly abandoned it in my own mind. I couldn't even remember giving my cybershadow the order to tag all the old suspects and watch for any status change within the global dataspace.

Yet when the information slipped into my mind as I awoke that morning I knew I could never ignore it. Whatever would Francis have said?

I kept the flyer's forward perception primary as we approached the portal. The circle of exotic matter had a breadth of nine hundred yards, the rim of a chasm that could be seen only from one direction. Its pseudofabric walls glowed green where they intersected the boundaries of normal space-time, forming a tunnel that stretched off

into middle-distance. Two lanes of flyers sped along its interior in opposite directions, carrying people to their new world and their hoped-for happiness.

I wished them well, for the next portal led to Nibeza, one of the Vatican-endorsed societies, with complex proscriptions built into its bionics. Essentially they were limited to medical functions and providing raw materials for industry, everything else had to be built the hard way. A society forever frozen on the cusp of the nineteen sixties, where people are kept busy doing their old jobs.

Fully half of the new worlds were variants on the same theme, the only difference being in the level of limitations imposed on their bionics. There were even some deactivated portals now; those that had been used to establish the Restart worlds. There were no bionics on such planets, nor even the memory of them. The new inhabitants had their memories wiped, awakening on arrival to the belief they had traveled there in hibernation sleep on an old slower-than-light colony ship that left Earth in the nineteen forties. They remained free to carry on their lives as though the intervening years had never happened.

I believe it was our greatest defeat that so many of us were unable to adjust naturally to our new circumstances, where every thought is a treasure to be incubated. It was a failure of will, of self confidence, which prevented so many from taking that next psychological step. The adjustment necessary was nothing like the re-education courses which used to mark our race's waves of scientific progress; an adaptation which could be achieved by simply going back to school and learning new skills. To thrive today you had to change your attitude and look at life from a wholly new perspective. How sad that for all its triumphs, the superb society we had constructed and systematically labored to improve for two thousand years was unable to provide that inspiration for everyone at the end.

But as I'd been told so many times, we now had the time to learn, and this new phase of our existence had only just begun. On the Earth below, nearly a third of the older adults spent their time daysleeping. Instead of the falsehood of enforced technological limitation on colony worlds, they immersed themselves in perfectly activated memories of the old days, trading such recollections amongst themselves for those blissful times spent in a simpler world. The vast majority, so they said, relished the days of childhood or first romances set in the age of horse drawn carriages and sailing ships.

Maybe one day they would tire of their borrowed times and wake from their unreality to look around anew at what we have achieved. For out there on the other worlds, the ones defying any restriction, there was much to be proud of. Fiume , where the gas giants were being dismantled to build a vast shell around the star, with an inner surface capable of supporting life. Milligan, whose colonists were experimenting with truly giant wormholes which they hoped could reach other galaxies. Oranses, home to the original sinners, condemned by the Vatican for their project of introducing communal sentence to every living thing on their planet, every worm, insect, and stalk of grass, thus creating Gaia in all her majesty. All this glorious playground was our heritage, a gift from the youth of today to their sulking, inward-looking parents.

My flyer soared out of the traffic stream just before we passed over the rim of the Tangsham portal. I directed it round the toroid of exotic matter to the station on the other side. The molecular curtain over the hangar complex entrance parted to let us through, and we alighted on one of the reception platforms. Charles Winter Hutchenson, the station chief, came out to meet me. The Hutchensons are one of our partners in Tangsham, a settlement which is endeavoring to transform people into starvoyagers, a species of immense biomechanical constructs that will spend eternity exploring space. Placing a human mind into the core of such a vessel is simple enough, but its psychology must undergo considerable adaptation to be comfortable with such a body. Yet as I saw on my approach to the portal, there was no shortage of people wishing to join the quest. The solid planets in the Tangsham star system were ringed with construction stations, fed by rivers of matter extracted from asteroids and gas giants. Energy converter nodules had been emplaced deep within the star itself to power such colossal industrial endeavor. It was a place of hard science; there was little of nature's beauty to be found there.

"Pleasure to welcome you on board," Charles Winter Hutchenson said warmly. "I didn't know elder representatives concerned themselves with incidents like this."

"I have several motives," I confessed. "I met Carter Osborne Kenyon a long time ago. Attending to him now is the least I can do. And he is one of the senior nuclear engineers on the project, he's entitled to the best service we can provide. Is he back yet?"

"Yes. He arrived about an hour ago. I halted the transshipment as you asked."

"Fine. My cybershadow will take care of the official casework for us. But I'd like to assess the requirements in person first."

"Okay. This way." He led me over to a cathedral-sized cargo hall where the stasis chamber was being kept. It was a translucent gray cylinder suspended between two black glass slabs. The outline of a prone human figure was just visible inside.

My cybershadow meshed me with the chamber's control AI, and I instructed it to give me a status review. Carter Osborne Kenyon wasn't in a good condition.

There had been an accident on one of Tangsham's construction stations; even with our technological prowess, machinery isn't flawless. Some power relays had surged, plasma temperature had doubled, there had been a blow-out. Metal was vaporized as the errant plasma jet cut its way through several sheets of decking. Loose panels had swung about, one of them catching Carter a severe blow. The left side of his body had been badly damaged. Worse than that, the edge of the metal had cracked his skull open, pulping the brain tissue inside. It would have been fatal in an earlier age. He was certainly clinically dead before he hit the ground. But the emergency systems had responded efficiently. His body had immediately been sealed in stasis, and microdrones had swept the area, gathering up every cell that had splashed across the floor and nearby walls. The cells were subsequently put in stasis with him.

We had all the component parts, they just had to be reassembled properly. His genome would be read, and each damaged cell repaired, identified, then replaced in its correct location. It could be done on Tangsham, but they would have to commit considerable resources to it. While Earth, with its vast elderly population, retained the greatest level of medical expertise among all of the settled worlds, and subsequently devoted the highest percentage of resources to the field.

That concentration of knowledge almost meant our software and techniques remained far ahead of everyone else. Carter's best chance for a full reanimation and recovery was with us.

"The damage is within our accepted revival limits," I told Charles Whiter Hutchenson. "I'll authorize the procedure and take him back with me to the institute clinic."

The station chief seemed glad that the disruption to his routine was being dealt with so propitiously. He instructed the cargo hall's gravity

field to refocus, and the stasis chamber bobbed up into the air, then slid away to my flyer's hold.

I left the portal, and guided the flyer directly to the Raleigh institute. It wasn't just the physical cell structure of Carter's brain which the medical technicians would repair, his memories too would have to be re-established. That was the part of him I was most interested in salvaging. It was as close to time travel as I would ever get.

With the sensorium integration routines developed for the daysleepers I would be able to drop right into his world. I would be there, observing, listening, and tasting, right from the very first time he met Justin Ascham Raleigh during that initial freshers week, until the night of the murder. And unlike him, I wouldn't view those moments through sentiment-I'd be scouring every second for anomalies, hints of out of character behavior, the misplaced nuance of a single word.

There were three and a half solid years to reconnoiter. I wasn't just examining the time they were in each other's presence. Anything that was said and done during that time could prove crucially relevant. Even his dreams might provide a clue.

It would take a while. There were so many resources I had to supervise and negotiate over, I couldn't schedule much current time to the case, maybe an hour a week. But I'd waited this long now. Time was no longer a relevant factor.

SIX

Eta Canine HO 2038

The deepflight ship eased out of the wormhole portal and twisted smoothly to align itself on the habitat disk. Two light years away, Eta Carinae had inflated across half of the universe. Its blue-white ejecta lobes were webbed with sharp scarlet lines as the outer plasma envelope slowly radiated away their incredible original temperature. The entire edifice was engulfed in a glowing crimson corona that bristled with spiky gas jets slowly dissipating out toward the stars. Fronds of dark cold dust eddied around it at a greater distance, the remnants of earlier explosive activity.

Eta Carinae is one of the most massive, and therefore unstable, stars in the galaxy. It is almost the most dauntingly elegant. I could appreciate why the transcendents had chosen to base themselves here, ten thousand light-years away from Earth. Despite its glory, an ever-present reminder of matter's terrible fragility. Such a monster could never last for more than a few million years. Its triumphant end will come as a detonation that will probably be seen from galactic superclusters halfway toward the edge of infinity.

How Justin Ascham Raleigh would have loved this.

The habitat appeared in our forward sensors. A simple white circle against the swirling red fogs of the hulking sky. Two hundred miles across, it was alone in interstellar space apart from its companion portal. One side flung out towers and spires, alive with sparkling lights. The other was apparently open to space, its surface undulating gently with grassy vales and meandering streams. Forests created random patches of darker green that swarmed over the low hills.

"We have landing clearance," Neill Heller Caesar said.

"Have they changed the governing protocols?" I asked. I wasn't unduly nervous, but I did want this case to go to its absolute completion.

He paused, consulting his cybershadow. "No. The biononic connate acknowledges our authority."

The deepflight ship slid through the habitat's atmospheric boundary without a ripple. We flew along an extensive valley, and alighted at its far end, just before the central stream broke up into a network of

silver runnels that emptied into a deep lake. There was a small white villa perched on the slope above the stream, its roof transparent to allow the inhabitants an uninterrupted view of Eta Carinae.

I followed Neill Heller Caesar across the spongy grass, impressed by how clean and natural the air smelled. A figure appeared in the villa's doorway and watched us approach.

It was so inevitable, I considered, that this person should be here of all the places in the universes we had reached. The transcendent project was attempting to imprint a human mind on the fabric of space-time itself. If they succeeded we would become as true angels, creatures of pure thought, distracted by nothing. It was the final liberation to which Bethany Maria Caesar had always aspired.

She smiled knowingly at me as I came through the gate in the white picket fence surrounding her garden. Once again, the elegant twenty-year-old beauty I'd seen in Justin's rooms at Dunbar College . I could scarcely remember the wizened figure who'd talked to me on Io.

"Edward Buchanan Raleigh." She inclined her head in a slight bow. "So you never gave up."

"No."

"I appreciate the pursuit of a goal, especially over such a length of time. It's an admirable quality."

"Thank you. Are you going to deny it was you?"

She shook her head. "I would never insult you like that. But I would like to know how you found out."

"It was nothing you could have protected yourself from. You see, you smiled."

"I smiled?"

"Yes. When my back was turned. I've spent the last thirty years reviewing Carter's memories of his time at Oxford ; accessing a little chunk of them almost every day. I'd gone over everything, absolutely everything, every event I considered remotely relevant was played again and again until I was in danger of becoming more like him than he ever was himself. It all amounted to nothing. Then I played his memories right to the bitter end. That night when Francis and I arrived at Justin's rooms, I asked detective Pitchford to take blood

samples from all of you. He was rather annoyed about it, some junior know-it-all telling him how to do his job. Quite rightly, too. And that was when you smiled. I couldn't see it, but Carter did. I think he must have put it down to you being amused by Pitchford's reaction. But I've seen you smile like that on one other occasion. It was when we were on Io and I asked you to come back to Earth because of the way low gravity was harming you. I asked you because I didn't understand then what the Caesars wanted with Jupiter. You did. You'd worked out in advance what would happen when bionics reached their full potential and how it could be used to your advantage. You were quite right, too, that particular orthodox branch of your family has already consumed Ganymede to build their habitats, and they show no sign of slowing their expansion."

"So I smiled at you."

"Yes. Both times you were outsmarting me. Which made me wonder about the blood sample. I had your sample taken out of stasis and analyzed again. The irony was, we actually had the relevant test back in eighteen thirty. We just never ran it."

"You found I had excessive progesterin in my blood. And I smiled because your request confirmed the investigation would go the way I'd extrapolated. I knew I'd be asked for a sample by the police, but it was a risk I was prepared to take, because the odds of anyone making a connection from that to the murder were almost nonexistent."

"The most we'd be likely to ask was how you got hold of an illegal contraception. But then you were a biochemist, you were probably able to make it in the lab."

"It wasn't easy. I had to be very careful about equipment usage. The church really stigmatizes contraception, even now."

"Like you say, using it still wasn't a reason to murder someone. Not by itself. Then I wondered why you were taking contraception. Nearly a third of the girls at university became pregnant. They weren't stigmatized. But then they're free to come back in fifty or seventy years after they've finished having children, and pick up where they left off. Not you though. I believed you were suffering from low-gravity deterioration on Io because I had no reason to think differently."

"Of course you didn't," she said disdainfully. "Everybody thinks the Sport of Emperors just bred the families for long life. But the Caesars

were much cannier and crueler than that. There are branches of the family bred to reinforce other traits."

"Like intelligence. They concentrated on making you smart at the expense of longevity."

"Very astute of you, Edward. Yes, I'm a Short. Without biononic DNA reset I wouldn't have lived past a hundred and twenty."

"You couldn't afford time off from university to have children. It would have taken up half of your life, and you could already see where the emerging sciences were leading. That century was the greatest age of discovery and change we've ever had. It would never be repeated. And you might have been left behind before bionics reached fruition. No problem for us, but in your case being left behind might mean death."

"He didn't care," she said. Her eyes were closed, her voice a pained whisper. "He loved me. He wanted us to be together forever and raise twenty children."

"Then he found out you weren't going to have children with him."

"Yes. I loved him, too, with all my heart. We could have had all this future together, if he'd just made an allowance for what I was. But he wouldn't compromise, he wouldn't listen. Then he threatened to tell my college if I didn't stop taking the progestin. I couldn't believe he would betray me like that. I would have been a disgrace. The college would have sent me away. I didn't know how much value the Caesars would place on me, not back in those days, before I'd proved myself. I didn't know if they'd cover for me. I was twenty-one and desperate."

"So you killed him."

"I sneaked up to his room that night to ask him one last time. Even then he wouldn't listen. I actually had a knife in my hand, and he still said no. He was such a traditionalist, a regular bloke, loyal to his family and the world's ideology. So, yes, I killed him. If I hadn't, today wouldn't exist."

I looked up at the delicate strata of red light washing across the sky. What a strange place for this to finally be over. I wondered what Francis would make of it all. The old man would probably have a glass of particularly fine claret, then get on with the next case. Life was so simple when he was alive.

"It would," I said. "If not you, then someone else would have reached the breakthrough point. You said it yourself, we were freefalling to the plateau."

"All this does put us in an extremely awkward position," Neill Heller Caesar said. "You are the inventor of biononics, the mother of today's society. But we can hardly allow a murderer to go around unpunished, now can we."

"I'll leave," she said. "Go into exile for a thousand years or whatever. That way nobody will be embarrassed, and the family won't lose any political respect."

"That's what you want," I said. "I cannot agree to that. The whole reason that we have family command protocols built in to biononics is to ensure that there can be no radical breakaways. Nobody is able to set up by themselves and inflict harm on the rest of us. Humanity even in its current state has to be able to police itself, though the occasions where such actions are needed are thankfully rare. You taking off by yourself, and probably transcending into a pure energy form is hardly an act of penance. You killed a member of my family so that you could have that opportunity. Therefore, it must be denied you." My cybershadow reported that she issued a flurry of instructions to the local biononic connate. It didn't acknowledge. Neill Heller Caesar had kept his word. And I marveled at the irony in that. Justice served by an act of trust, enacted by a personality forged in a time where honesty and integrity were the highest values to which anyone could aspire. Maybe the likes of he and I did have something valid to contribute to everything today's youngsters were busy building.

Bethany Maria Caesar stiffened as she realized there was to be no escape this time. No window with a convenient creeper down which to climb. "Very well," she said. "What do you think my punishment should be? Am I to hang from the gallows until I'm dead."

"Don't be so melodramatic," Neill Heller Caesar told her. "Edward and I have come to an agreement which allows us to resolve this satisfactorily."

"Of course you have," she muttered.

"You took Justin's life away from him," I said. "We can produce a physical clone of him from the samples we kept. But that still won't be him. His personality, its uniqueness is lost to us forever. When you're dealing with a potentially immortal being there could be no crime

worse. You have wasted his life and the potential it offered; in return you will be sentenced to exactly that same punishment. The difference is, you will be aware of it."

Was that too cruel of me? Possibly. But then consider this: I once knew a man who knew a man who had seen the Empire's legionaries enforcing Rome 's rule at the tip of a sword. None of us is as far removed from barbarism as we like to think.

SEVEN

Life Time

Bethany Maria Caesar was taken from the Eta Cannae habitat on our deepflight ship. We disembarked her on a similar habitat in Jupiter orbit which the Caesars had resource funded. She is its sole inhabitant. None of its bionics will respond to her instructions. The medical modules in her body will continue to reset her DNA. She will never age nor succumb to disease. In order to eat, she must catch or grow her own food. Her clothes have to be sewn or knitted by herself. Her house must be built from local materials, which are subject to entropy hastened by climate, requiring considerable maintenance. Such physical activities occupy a great deal of her time. If she wishes to continue living she must deny herself the luxury of devoting her superb mind to pure and abstract thoughts. However, she is able to see the new and wondrous shapes which slide fluidly past her region of space, and know her loss.

Her case is one of the oldest to remain active within our family thoughtcluster. One day, when I've matured and mellowed, and the Borgias have left the Vatican , I may access it again.